NOKIA
CONSUMER ELECTRONICS

Service-Manual

STEREO PLUS

TV
059a

1994

NOKIA SALORA OCEANIC

ITT-01579

A 34a

Chassis STEREO PLUS

Abglelch/Callbratlon
Equilibrage/Messa a punto

Kurzbedienungsanleitung
Summarized instructions
Mode d'emplol abrege
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Ersatzteile/Replacement parts
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6611 73 19

Unterlagen-Oberslcht

Documents view

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B 33a

Tuner

HYPERBAND	**5823 1 0 1 4**
SAT-Modul	**58564017**

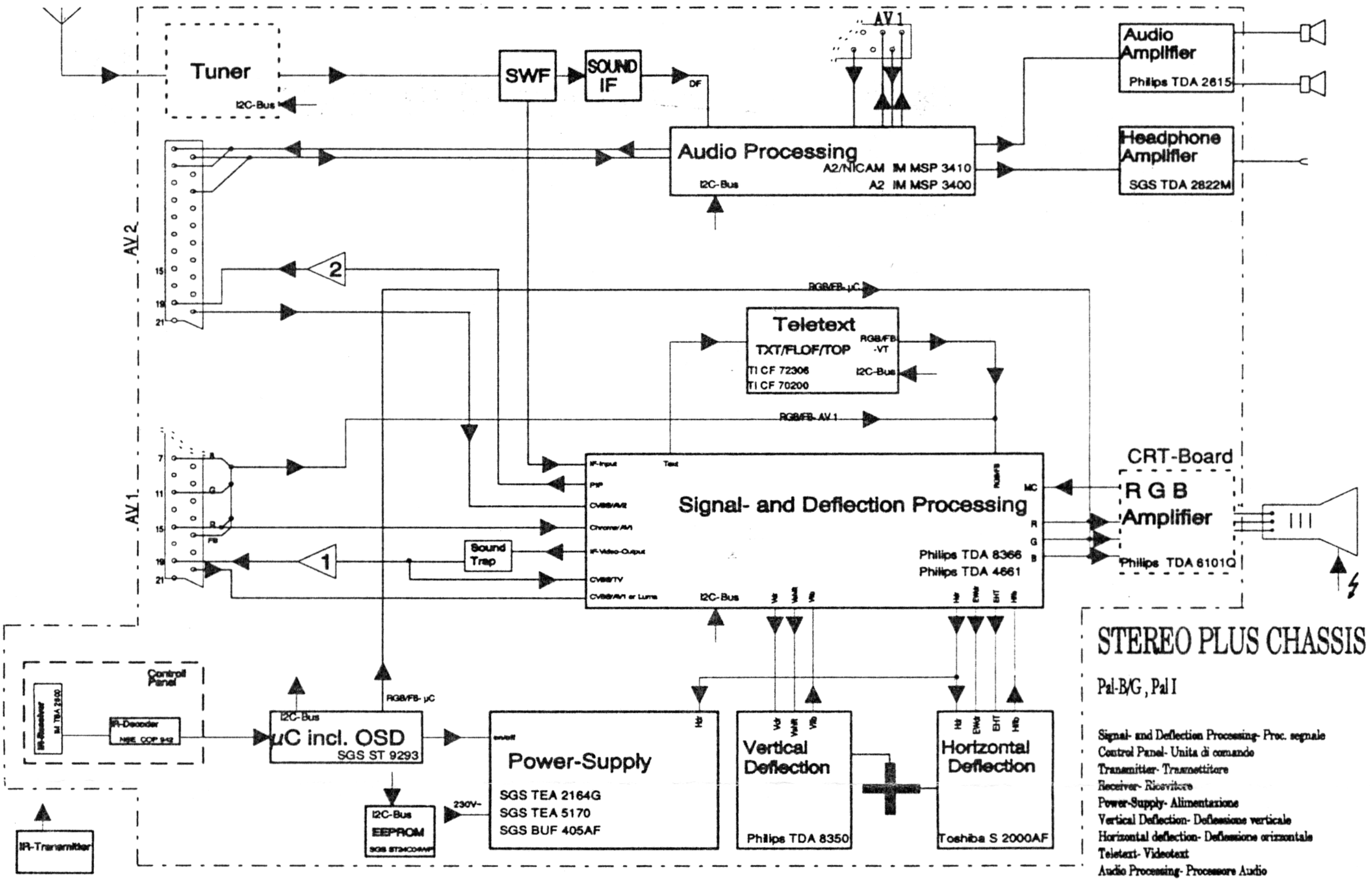
6611 73 20

Achtung !	Bei Reparaturen gultige Sicherheitsvorschriften beachten !
Warning !	Service and repair work to be performed only in accordance with existing safety regulations
Attention I	En faisant des reparations tenez compte des prescriptions de securite !
Attenzione !	Osservare le norme di steurezza vigenti in caso di riparazioni I

Bei Nachbestellungen von Manualen bitte Geratetyp und Gerate-ldentnummer angeben.
When re-ordering manuals, please quote the model name and part number.
En cas de commando supplementaire de manuels veuillez indiquer le typ **et** le **numerode** l'appareil.
Per riordinare i manuali, indicare il modello detl'apparecchio ed Il numereo categorico.

66117318(9408)8

Anderungen vorbehallen / Modilkalions reserved / Modifications resovees / Con riserva di modiliche


Tuner
I2C-Bus
SWF
SOUND IF
DF
AV 1
Audio Amplifier
Philips TDA 2615
Audio Processing
A2/NICAM IM MSP 3410
A2 IM MSP 3400
I2C-Bus
Headphone Amplifier
SGS TDA 2822M
AV 2
15
19
21
2
RGB/FB- µC
Teletext
TXT/FLOF/TOP
RGB/FB -VT
TI CF 72306
TI CF 70200
I2C-Bus
RGB/FB- AV 1
CRT-Board
AV 1
7
11
15
19
21
B
G
R
FB
1
Sound Trap
IF-Input
Text
PIP
CVBS/AV2
Chroma/AV1
IF-Video-Output
CVBS/TV
CVBS/AV1 or Luma
Signal- and Deflection Processing
RGB/FB
MC
R
G
B
Philips TDA 8366
Philips TDA 4661
I2C-Bus
EHT
R G B Amplifier
Philips TDA 6101Q
Controll Panel
IR-Receiver
IM TBA 2800
IR-Decoder
NSE COP 942
I2C-Bus
µC incl. OSD
SGS ST 9293
RGB/FB- µC
I2C-Bus
EEPROM
230V~
on/off
Power-Supply
SGS TEA 2164G
SGS TEA 5170
SGS BUF 405AF
Vertical Deflection
Philips TDA 8350
Horizontal Deflection
EHT
Toshiba S 2000AF
IR-Transmitter

STEREO PLUS CHASSIS

Pal-B/G , Pal I

Signal- and Deflection Processing- Proc. segnale
Control Panel- Unita di comando
Transmitter- Trasmettitore
Receiver- Ricevitore
Power-Supply- Alimentazione
Vertical Deflection- Deflessione verticale
Horizontal deflection- Deflessione orizzontale
Teletext- Videotext
Audio Processing- Processore Audio
Headphone amplifier- Amplificatore per cuffia
Sound- Suono

Achtung: (betr. Schaltnetzteil)

Fur **CO 12** nur Originalteil 3422 06 37 verwenden. Bei handelsublichem Elko **CO 12** muB parallel 0,47 uF MKT **zusatzllch** bestuckt werden.

1. **Mlt abgetrennter Horizontalendstufe (z.B. AnschluB 2 an TK 60 often) und einer Ersatzbelastung an der Kathode von VO 41 (100W Gluhlampe) muR das Netzteil ca. 100% der Sollspannung llefern.**
2. Zur Fehlersuche bei Sicherungsbetrieb des Netzteiles kann **CO 15** uberbruckt werden. Wurde der Sicherungsbetrieb durch einen fluchtigen Uberlastfall ausgelost, kann das Gerat durch Aus- und Einschalten des Netzschalters wieder in Betrieb genommen werden. Bei Aniaufprobleme kann durch uberbrucken von Kollektor/ Emitter von **VE 14** (Control unit) , das Netzteil zwangsanlaufen.
3. Auf brummfreie Gleichspannung achten. Z.B. die Brummspannung von U1 liegt bei ca. 4V und sollte, bedingt durch Kapazitatsverlust von CO 42, nicht viel groBer werden. Die Brummspannungen der ubrigen Gleichspannungen sollten unter 1V liegen. Die Brummspannungen von U2, U3 und U5 liegen im mV-Bereich.

Instructions for repair work

N.B.:(cc. switch-mode)

Please use only original component 3422 06 37 for CO 12 . If standard size electrolyt capacitor CO 12 is used, parallel 0,47 uF MKT must be installed additionally.

1. **With the horizontal output stage disconnected (e.g. connection 2 at TK 60 open) and a substitute load at the cathode of VO 41 (100 W lamp), the power pack must supply approx. 100% of the setpoint voltage.**
2. For servicing the set under operating conditions when the electronic fuse has activated, can be connected across CO 15, IF the electronic fuse cuts out due to a momentary overload, the appliance can be re-started by switching the mains switch off and then **on** again.
3. Make sure there is hum-free d. c. voltage available. For example: the ripple voltage of U1 is approx. 4V and should, due to capacitance loss of CO 42, not increase much more. The ripple voltages of the other d.c. voltages should be less than 1 V. The ripple voltages of U2, U3, U5 are in the mV range.

Consigli per le riparazioni

Attenzione:(circ. alimentazione)

Utilizzare soltanto pezzo originals 3422 06 37 CO 12. Net Elko CO 12 reperibili in commercio deve essere ulteriormente montato un 0,47uF MKT.

1. **Con lo stadio dl usclta orizzontate staccoto (ad es. coltegamento 2 al TK 60 aperto) e un carico dl sostttuzlone al catodo dl VO 41 (una lampada a 100W),**
   I'allmentatore deve fornire circa I1100% delle tensioni nominal).
2. Per la ricerca di errori in caso di funzionamento di sicurezza del blocco dialimentazione, CO 15 essere cavallottato. Se il funzionamento di sicurezza dovesse scattare per via di un sovraccarico transitorio, l'apparecchio pu6 essere rimesso in funzione azionando l'unterruttore principale d'inserzione disinserzione.
3. Controllare che le tensioni continue siano prive di ronzio. Per es la tensione di ronzio di U1 si trova a ca. 4V e non dovrebbe aumentare di morto, in dipendenza della perdita di capacrta CO 42. Le tensioni di ronzio delle rimanenti tension! continue dovrebbero rimanere inferiori a 1V. La tensione di ronzio di U2, U3, U5 si trovano nel campo dei mV.

Conseils de reparation

Attention: (du bloc secteur de commutation)

Utiliser uniquement la piece originate 3422 06 37 (CO 12). Dans le cas de condensateurs electrochimiques usuels **CO 12** 0,47uF MKT doit etre equipe en **plus.**

1. Lorsque I'etage final horizontal est **deconnecte (par ox. raccordemont 2 sur TK** 60 **ouvert) to bloc •eteur dolt dallvrer** 100% env. des tensions de consigne.
2. Pour la detection d'erreurs en fonctionnement de securite du bloc secteur, il possible de ponter CO 15. Lorsque le fonctionnement **de** surete est declenche a cause d'une surcharge transitoire, I'appareil peut etre remis en marche au moyen du commut. principal de mise en et hors circuit.
3. Veiller a la presence de tensions continues exemptes d'ondulation. La tension d'ondulation de U1 par exemple est de 4V env. et ne devrait pas beaucoup augmenter en raison d'une perte de capacite de CO 42. Les tensions d'ondulation des autres tensions continues devraient toujours etre inferieures a 1 V. Les tensions d'ondulation de U2, U3, U5 se srtuent dans la gamme des mV.

Service-Abgleich / Service Calibration / Taratura di servizio

Service-Mode.

Sie kommen in den Service-Mode, wenn Sie hinterein. am TV-Geber .Taste "i" . "M" und "P" drucken. Service- Mode verlassen^Taste "TV".

- To go to service mode. press the following buttons on the tv transmitter one after the other: "i" . "M" and "P". Service Mode out= button'TV".

• Entrerete nel modo di servizio premendo in sequenza i tasti "i", "M" e "P" sul trasduttore del televisore. Service-mode uscita = tasti "TV".

Taste "M"	a Memory
Taste "▲▼"	= weiterschalten von Abgleich zu Abgleich/ Switching from calibr. to calibr./ Passaggio da equilibratura ad equilibratura
Taste "◄ ►"	= Werte einstellen/ Setting values/ Regolazione dei valori

U1, Focus,UG2.AGC (nur bei Multinorm) und ZF **werden nicht im Service-Mode** eingestellt.
U1 , focus, Ug2 ,AGC (only Multinorm sets) and DF are settings not in service mode.
U1, il fuoco ,il Ug2,il AGC (app. Multinorm) e AF sono regolazioni che non nentrano nel modo di servizio.
r

U1 mrt RO 80 auf 150 V ± 0,5 V (110°) **,** 130 V (90°) an CO 42 bei Helligkeit und Kontrast min. einstellen.
- Use **RO 80** to set U1 to 150 V ± 0.5 V (110'-), 130 V (90') at **CO 42** with contrast and brightness min.
- Regolare U1 con RO 80 su 150 V ± 0.5 V(110V"), 130 V (90^s) su punto di controllo CO 42 con luminosita e contrasto al minimo.

Step	Abgl./ Calibr./ Equilibr.	OSD-Anz./ Indicazione	Bemerkung' Remark/ Note
1	Vert.Mittenlage Vert. centre position Pos. intermedia verticale	**V.MID-POS...** (46)	Testbildmitte mittig einstellen (untere Halfte ist schwarz!). Adjust centre of test picture to a centred pos.(bottom half is black). - Centrare il centro del monoscopio (la meta inferiore e nera!).
2	Vert.Oberenlage Vert. top position Pos. superiore verticale	**V.TOP-POS...** (43)	Oberen Rand einstellen (untere Halfte ist schwarz!). Adjust top edge (bottom half is black). Regolrare il margine superiore (la meia inferiore e ne'a!).
3	Vert. Amplitude/ Amp. vert.	**V.AMPL. ..** (38)	Unteren Rand einst./ Adjust bottom edge Regolare il "-largine inferiore.
4	Hor. Lage/ pos./ Pos. orizz. pos./	H.SHIFT .. (29)	Testbildmitte mittig einst./ Adjust centre of test picture '.o a centred Centrare il centro del monoscopio
5	Hor. Amplitude/ Orizz. amp.	**H.AMPL ..** (57)	
6	Hor. Kissen/ Orizz. cuscinetto	**P.AMPL. ..** (31)	
7	Hor. Trapez/Orizz. trapezoid.	**P.TILT ..** (31)	

FOCUS mil RK 60 am Hor. Transformatof (oberer Einaeller) auf optimale Scharfe einstellen. / Set focus to optimum definition using RK 60 (Hor.transtormari.
Regolare il (uoco sulla nitidezza otiimale con I' RK 60 del trasformatore orizzontale (regolatore superiore).

8,9,10 G2- und Farbtemperalur/ G2- and colour temperature/ G2 e temperatura del colore (Grautreppenies;biid o.a.)

Im Grun-Drive (8). Rot-Drive (10) und Blau-Dnve (9) mit den < > Tasten jeweils den OSD-Weri von 32 einslel!en, Ug2-Einsteller (RK60. ur-erer Einst. am Zeiientrafo) auf Mittenstellung. HeU'gkeitselnst. auf NennhelligKeit fder Scnwarzbalken der Grautreppe dart gerade nicht 'euchten'). Mit Oszilloscop (Tastkoof 100:1) den hdchsien Schwarzwert an den Bildrdhrenkathoden (R.G.B) ermitteln.MIt RK 60 den Wen; dieser Kainode auf 160 V igemessen gegen Masse') einstellenim Grun- Blau- und Rot-Drive mit den -< ^ Tasten in den hellen Partien durch verkleinern der OSD-Werte auf taroneutraies Bild einstellen. Mindestens ein Dnve-Wert solfte aut 32 ble.ben

-Set on OSO value of **32** in each of the following drives: in [he greeni8»-red(I0)-and blue(9) drive, using the < > button RK 60 G2 adjuster to its centre setting. Set brightness adjuster to rated brightness (the black bar of the grey scale must just not be lit upi). Use an oscilloscope (Probe 100:1) to determine Ihe highest black value a; the picture-lube cathodes (R.G.B) Use the RK 80 ad[uster lo sel this value to 160 V. Use 'he < » button to adjust to a coiour.neuira! picture in 'he lichi a'»as in green- blue- and red drive IOSD value must be smaller then 32). At least one of the level controls should be remain at 32.

-Regolare un valore di OSD di 32 di volta nel drive verde (Sl.rosso (10) nel blu (9) con il tasto ^ > . Posizionare RK 60 G2 sulla pos. med'ana. Regolatore de'ia luminosita posizionato sulla luminosita nominale (Ia linea nera deila scala di tonalita di grigio non deve essere illummata'). Tramite r oscilloscсpio. ceterm. il valore del ;ivello massimo del nero (sonda 100-1) sui catodi del dnescopio (R.V B' Co" 'I regolatore RK60 regislrare questo valore su 160 V (misura a massa' Nel d"ve verde. blu nel rosso. regolare le zone chiare con il laslo **•< >** ad immagine di colore neutro (reg. un valore di OSD < 32). Almeno un regolare dovrebbe restare in posizione 32.

11 OSD SHIFT.. (43)
12 LNB VOLT .. betr. SAT-Gerate/sets siehe Bedienungsanleitung/ see operating instruction
13 **LOUDNESS: ..** (on)
14 C4 BIT CHECK: .. (On)
15 NICAM: ..(on/off)
16 **CARRIER/MUTE:** ..(off)
17 **TEXT SYNC AFC2:** ..(off)
18 VT CHAR: .. (WEST/TURKEY)

19 AGC. Uber Antenneneingang HF-Signal ohne Tontrager > 5mV auf einem mittl. UHF-Kanai einspeisen In den Sen/Ice-Mode gehen iSiehe Kapitel "Sen/ice-Mode"). Mil Taste A aut OSD-Anzeige "AGC" stellen. Oscilloscop iBanObreite>50 MHz) an Tuner-ZF-Ausgang Testpunkt TL 01 Oder TL 02 und Masse ansch;ie3en. Die gelbe Tas'e am Geber drucken (OKAY) . Mit Taste •*> aut 450mVss ± 50 mV bezogen auf die Synchronspitzen des Signales einstellen. Mil M-Taste Wen aosoeicrern.

- Feed in RF signal without sound carrier with >5 mV on a medium UHF channel via the aerial input. Go to service mode (see section ef: '.led "Service moce"). Use button A to set the OSD to "AGC". Connect oscilloscope (bandwidlh>50 MHz) to the tuner's IF output |TL 01 or TL 02| and to ground. Press the yellow button **at** the pick- uo. **Use** button •<» to adjust to 450mVpp ± 50 mV with reference to the signals synchronizing peaks. Use the "Memory" button to store the value in memory

-Tramite I' ingresso dell' antenna, immettere il segate HF senza portante audio con >5mV su di un canale UHF (a trequenza ul'raelevata intermedio. Entrare nel modo di servizio (ved. il capltolo " Modo dl servizio"), Regolare sull'lndicaz'one OSD "AGC" con il tasto A. Collegare I'oscilloscopio flarghezza di oanda >50 MHz) a'I'jscita 2F del sinionizzatore (TL 01 ed TL 02) ed a massa. Premere il lasto giallo sul Irasduttore. Regolare su 450mV ± 50 mV facento nfenmentoai piccni di sincronismo del segnale premendo il tasto ^>. Memonzzare Il valore premendo il tasto **"M"**

19 AGC (Multinorm sets) Uber Antenneneingang HF-Signal ohne Tontrager > 5mV auf einem mini. UHF.Kanal einspeisen
Oscilloscop (Bandbreile>50 MHzl an Tuner-ZF.Ausgang Testpunkt TL 01 Oder TL 02 und Masse anschlieBen. Mil RL 217 iMullinorm.Mooull auf 4SOmVss ; 50 mV bezogen auf die Synchronspitzen des Signales einstellen.

- Feed in RF signal without sound carrier with >5 mV on a medium UHF channel via the aerial Input, Connect oscilloscope (bandwidth>53 MHz) to the tuner's IF output (TL 01 or TL 02) and to ground. Use **RL** 217 (Mullinorm-Modul) to adjust to 450mVpp ± 50 mV with reference to Ihe signals synchronizing peaks.

-Tramite I' ingresso dell ' antenna, immettere il segale HP senza ponante audio con >5mV su di un canaie UHF (a frequenza ultraeteva'a intermedio. Cofleca'e I'oscilloscopio (larghezza di banda >50 MHz) all'uscita ZF del sintonizzalore (TL 01 eo TL 02) ed a massa. Premere il lasto giallo sul Irasdullore Regolare su 450mV ± 50 *T'\i* facenio hferimentoal piochi di s*ncronismo del segnale premendo il **RL 217** (Multinonn-Modul).

Equilibrage de service

Mode de service.
Pour activer le mode de service, appuyez consecutivement sur les touches "I", "M" et "P" du detecteur TV. Abandon du mode de service = louche "TV".
Touche "M" = memorisation
Touche "A T" = passage d'un equilibrage a l'autre
Touche "•<»"= reglage des valeurs
U1, le foyer et UG2 ne sont pas regles en mode de service.

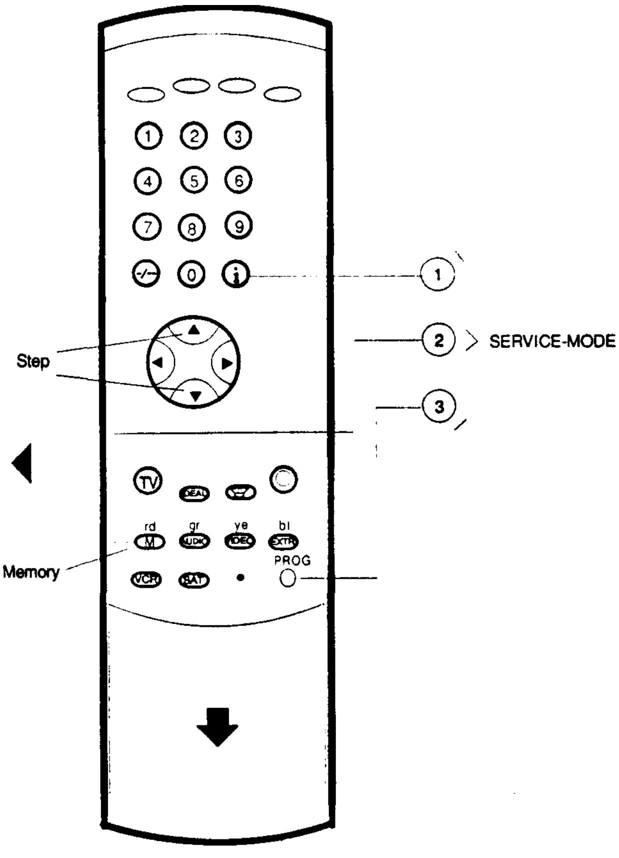
Reglez U1 sur 150 V +/- 0.5 V (110-), 130 V (90^s) au point de controle CO 42 a luminosite et contraste min. et ce, a l'aide de RO 80.

Etape	Equilibrage	Indication OSD	Remarque
1	Position vert. centrale	V.MID-Pos. .. (46)	Ajustez le centre de la mire sur une pos. centrale(la partie infer, noire).
2	Pos. vert. superieure	V.TOP.Pos. .. (43)	Ajustez la marge superieure (la partie inferieure est noire).
3	Amplitude vert.	V.AMPL. .. (38)	Ajustez la marge inferieure.
4	Position hor.	H.SHIFT .. (29)	Ajustez le centre de la mire sur une **position** centrale.
5	Amplitude hor.	H.AMPL .. (57)	
6	Coussin hor.	P.AMPL. .. (31)	
7	Traptee hor.	P.TILT.. (31)	

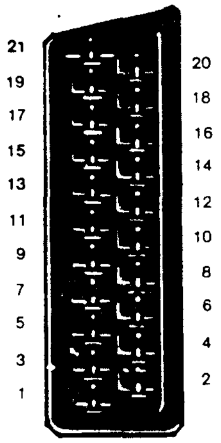
Ajustez le foyer sur nettete optimale avec RK 60 du transformateur (ajusteur superieur).

8,9,10 G2 et temperature de couleurs (mire de demi-teintes).
Reglez la valeur OSD de 50 en drive vert (8). en drive rouge (10) et en drive bleu (9) au moyen des touches •<>•. Ajusteur Ug2 (RK 60. ajusteur inferieur du transformateur de lignes) sur position centrale. Ajusteur de luminosite sur luminosite nominal^0 fla barre noire de l'echelle des demi-teintes ne doit juste pas etre allumee !). Determinez la valeur de noir maximale aux cathodes du tube image (R. V. B) au moyen de l'oscilloscope (bouton test 100:11. Reglez la valeur de cette cathode sur 165 V (mesuree centre la masse) a l'aide de RK 50. En drive vert. bleu et rouge, reglez sur image neutre en couleurs dans les parties claires en diminuant les valeurs OSD a l'aide des touches <»•. Au moins une valeur drive devrait demeurer sur 50.

11 OSD SHIFT .. (43)
12 LNB VOLT .. app.SAT
13 LOUDNESS: .. (on)
14 C4 BIT CHECK: .. (on)
15 NICAM: .. (on/off)
16 CARRIER/MUTE: .. (off)
17 TEXT SYNC AFC2: .. (off)
18 VT CHAR: .. (WEST TURKEY)
19 **AGC** Alimentez le signal HP sans support sonore via l'entree d'antenne avec 5 mV +,'- 2 mV sur un canal UHF moyen.
Raccordez l'oscilloscope (bande > 50 MHz) a la sortie F.I. du tuner, point test TL 01 ou TL 02 et masse.
Reglez sur 450 mVcc +;- 50 mV par rapport aux cretes synchrones du signal en actionnant la RL 217.



Tastenbelegung der IR-Sender bei Service-Betheb.
Infrared remote gun functions in Service mode.
Occupation des touches de l'emetteur IR en mode de fonctionnement service
Occupazlone del tasti des Irasmertitora a raggi infrarossi in lunzionamento dl servizio.



Euro-AV-Buchse / SCART socket
Prise Euro-AV / Presa dl Perftelevislone

1 Audio B Ausgang / output / sortie / uscita
2 Audio B Eingang / input / entree / entrata
3 Audio A Ausgang / output / sortie / uscita
4 **Masse** / earth / masse / massa
5 Blau, Masse / blue, earth / bleu. masse / massa. bkJ
6 Audio A Eingang / input / entree / entrata
7 **Blau** / blue / **bleu / blu**
8 Schaltspannung / switching voltage / tension de commutation / commutazione di **funzlone**
9 Grun, Masse / green, earth / vert. masse / massa verde
10 Datenleitung 2 / data line 2 / ligne de donnees 2 / non collegato
11 Grun / green / vert / verde
12 Datenleitung 1 / data line 1 / ligne de donnees 1 / non collegato
13 Rot. Masse / red. earth / rouge, masse / massa rosso
14 **Masse** / earth / masse / massa
15 Rot / red / rouge / rosso (Chroma-Sign. / **Chroma sign. /** Sign. de chrominance / Segn. cromal
16 Austastsignal / blanking signal / signal de suppression / cancellazione
17 Video Masse / video earth / masse video sortie / massa video
18 Austastsignal Masse / blanking signal earth / masse wdeo entree / massa cancellazione
19 Video Ausgang / output / sortie / uscita
20 Video Eingang / input / entree / enlrata (Luminanz-Sign. / Luminance sign. / Sign. de luminance / Segn. Lufflinanza)
21 Abschirmung und/oder Masse Leitung / shielding and/or earth lead / blindage et/ou masse ligne / massa comune

Bild- Referenz- Abgleich (ZL 22, Chassis 5864 43 01..06, 5864 43 21..23)

1. Programmtaste drucken.
2. Mit Curser •»>• auf "TV-Prog" stellen.
3. Mit den Zifferntasten einen mittleren Kanal z.B. Kanal **38** (607,25 MHz) eingeben.
4. Mit der **grunen** Taste auf "TV Frequency" stellen.
5. Mit Curser *A* (T) auf" AFC off" und dann mit Curser <^ auf "AFC **on"** stellen.
6. Mit **ZL 22** auf 607, **25** MHz stellen (auch bei anderen Kanalen immer auf "25" einstellen).

Ton- ZF- Abgleich (ZL 02, Chassis 5864 43 01..06, 5864 43 21..23))

Testbild einspeisen. Oscilloscop an Pin **12** vonn TDA 2545 anschlieBen. Mit **ZL 02** auf min. Bildinhalt abgleichen.

Picture reference calibration

1. Press the program button.
2. Use curser •<>• to set "TV-Prog"
3. Use the numbered buttons to enter one of the middle channels, e.g. Channel 38 (607.25 MHz)
4. Use the green button to set "TV frequency".
5. Use cursor A (T) to set "AFC off", and then **cursor <^ to set "AFC on".**
6. Use ZL 22 to set 607.25 MHz (even with other channels, always set to "25").

Audio IF calibration

Feed in the test picture. Connect an oscilloscope to Pin 12 of TDA 2545. Use ZL 02 to calibrate the min. picture content.

Equilibratura di riferimento del quadro

1. Premere il **tasto di programme**
2. Posizionare su"TV-Prog" con il cursore-o-
3. Con i tasti numerici. immettere un canale intermedio, ad esempio il canale 38 (607,25 MHz).
4. Posizionare su "TV Frequency" con il tasto **verde.**
5. Posizionare su "AFC off" con il cursore A (T) e su "AFC on" con il cursore <».
6. Posizionare su 607,25 MHz con ZL 22 (sintonizzare su "25" anche per gli altri canali).

Equilibratura dell'audio di frequenza intermedia

Alimentare il monoscopio. collegare l'oscilloscopio al pin 12 del **TDA 2545. Compensare sul min. contenuto d'imrnagine con ZL 02.**

Equilibrage d'image de reference

1. Appuyez sur la louche de programme.
2. Ajustez "TV-Prog" au moyen du curseur **<»•.**
3. Entrez un canal moyen. p. ex. le canal 38 (607.25.MHz) au moyen des touches numeriques.
4. Ajustez "TV Frequency" a l'aide de la louche verte.
5. Ajustez "AFC off" au moyen du curseur A iVi. puis "AFC on" a l'aide du curseur •<»-.
6. Ajustez 607,25 MHz au moyen de ZL 22 (reglez toujours sur "25" egalement dans le **cas d'autres canaux).**

Equilibrage du son **F.I.**

Alimentez la mire. Raccordez l'oscilloscope a la broche 12 du TDA 2545. Equilibrez sur contenu d'image min. a l'aide de ZL 02.

Achtung! Bei Reparaturen gultige Sicherheitsvorschriften beachten.
Rontgenverordnung: Die in der Rontgenverordnung festgelegte Ortsdosisleistung ist bei diesem Gerat durch die Bildrohrentype und die maximal zulassige Hochspannung gewahrleistet. Die Hochspannung darf maximal 28 RV betragen. Die Hochspannung liegt im zulassigen Bereich, wenn die Betriebsspannung der Horizontal-Ablenkstufe bei minimalem Strahlstrom 150 V ± 0.5 V (110°) 130V (90^{s}) betragt. Bei Reparaturen ist die Spannung zu uberprufen und gegebenenfalls mit RO 80 auf Sollwert einzustellen.

Warning! Service and repair work to be performed only in accordance with existing safety regulations.
X-ray regulations: The picture tube type and the maximum permissible high-voltage ensure that the **X-ray** intensity within the set remains far below the permissible value.
The high-voltage must not exceed 28 kV. The high voltage is within the permissible limits when the operating voltage of the horizontal deflection stage equals 150 V ± 0.5 V (110°)
130V (90°)at minimum beam current. Following servicing, check and adjust this voltage to the nominal value with RO 80.

Attention! En cas de reparations, tenir compte des regles de securite en vigueur.
Reglementation portant sur les rayons X: La puissance de dose locale fixee dans la reglementation relative aux rayons X est garantie dans le cas de cet appareil grace au type de tube-image et a la haute tension maximale admissible. La haute tension ne doit pas depasser un maximum de 28 kV. La haute tension se situe dans une zone admissible lorsque la tension de service de l'etage de convergence horizontale s'eleve a 150 V ± 0,5 V (HO^{3}) 130V *(90")* pour un courant de faisceau minimal. En cas de reparations, la tension doit ete controlee et. le cas echeant, etre ajustee sur la valeur de consigne au moyen de RO 80.

SchutzmaBnahmen fur **MOS-** Bauelemente beachten!
Pay attention to protective measures for MOS components!
Respecter les mesures de protections pour les composants de **MOS!**
Osservare le misure protettive per gli elementi costruttivi MOS!

Kurzbedienungsanleitung

Sender-Programmierung

Automatischer Suchlaul **(APS):** Speicherplatz **(z.B.** 1) **wahlen. Taste AUTO (IR-Sender) drucken. Die APS-Funktion speionert aile ortlich zu empfangenden** Pemsehprogramme. **Mit** der Taste TV zum allgemeinen Fernsehempfang zuruckschalten.

Manuelle Abstimmung: Taste PRG drucken; mit Cursor-Taste > Funktion aktivieren. Mit der **grunen Taste** kann **eine** Frequenz- od. Kanalnummem-Anzeige aufgerufen werden. Frequenz mit Cursor-Taste < ' > abstimmen. Mit der roten Taste M absoeichem u. mit der Taste **TV** zum allgemeinen Fernsehempfang zuruckscnalten.

Feinabstimmung (FINE TUNE): Taste PRG drucken: mit Cursor-Taste ^ Fun^ion aktivieren und mit cer grunen **Taste** Kanal-Anzeige aufrufen Uber FINE TUNE Kanalfrea. feinabst.

Umsch. der Kanattabelle (TAB): Taste PRG drucken; mit Cursor > Funktion aktiv. und mit der grunen Taste Kanal-Anzeige autrufen. Mit der Funkt. TAB Tabelle A od. B wahlen.

Sender sortieren

Taste PRG drucken. mit Cursor-Taste T die Funktion **SORT** wahlen und mit Cursor-Taste > akiivieren; der Speicherplatz 1 wird automatiscn angewantt. Mit Cursor-Taste •< •' > das zu speichernde Programm wahlen. Mil der **roten Taste M** abspeiohem; gteicnzeitig **wird der nachste Speicherplatz** angewahfl.

Schrittweise Programmwaht

Die Programmplatze 1 -99 schrittweise **mit den Tasten P A / V am Gerat Oder mit der Cursor-Taste A / V durchschalten.**

Bildeinstellungen

Bildformat. Farbe, Helligkeit. Kontrast u. Schartc: Taste VIDEO ilR-Sender) drucken. Mit Cursor-Taste A / T Einstetlfunktion wahlen. Mil der Cursor.Taste <(-) / K+) einstellen. Mit der Taste TV zum aUgerreinen Fernsehemotang zuruckscriaiten. ''

Idealbildeinsteltungen (Farbe,Helligkeil.Kontrast.ScharfeJ: Mil IDEAL-Tasie Ideal-Einstellfunbktionen wahlen; Taste **VIDEO** drucken. Mil Cursor-Taste A / V Einstellfunkiion wahlen und mit Cursor-Taste ^(-) / >•(+) einsteHen. Mit der roten Taste M speichern und mH der Taste **TV** zum allgemeinen Fernsehempfang zuruckschalten.

Toneinstellungen

Lautstarktt: Cursor-Taste ^(-) / ^(+), **Wird die** Stummscnaltung **(Laut»pr»cher-T«ste)** betatigt. kann mit **der Cursor-T««te ein angeschlossener** Kopmorer **geregelt werden.**

Summarized operating instructions

Station programming

Automatic program search (APS): select memory location (e.g. 1). Press the **AUTO** button (IR transmitter). The APS function will **store in memory all** TV programs which **can be** received at the TV set's location. To switch back to general TV reception, press the TV button.

Manual tuning: press the **PRG** button, use the > cursor button to activate the function. You can use the **green button** to call up a frequency or channel number display- Use the 4 1 ^ Cursor buttons to tune the frequency. To store in memory, press the red button M. and lo switch back to general TV reception, press the TV button.

FINE TUNE: press the PRG button; use the >• cursor to act. the fund.. and the green button to call up the channel display. Use the FINE TUNE fund. to fine-tune the channel freq.

Switching over the channel table (TAB): press the PRG button; use the > cursor button to activate the function, and the green button to call up the channel number display. Use the **TAB** function to select Channel Table **A** or **B.**

Sorting stations

Press the PRG **button,** use the T cursor button to select the **SORT** function and activate it with cursor button > : memory location 1 will **be** automatically selected. Select the program you want to store with cursor button •< -' > . Use the red button M to store in memory; the next memory location will be selected at the same time.

Slep-by-step program selection

Switch through program memory locations 1 - 99 **step by step.** using buttons **P A / V at the set or cursor button A / V .**

Adjusting the picture

Picture format, colour, brightness, **contrast and** sharpness: press the VIDEO button (IP transmitter). Use the A / V cursor button **to** select the adjusting **function, and** cursor button **<<** (-} and/or cursor button > (+) to adjust. To switch back to general TV reception, press the TV button.

Ideal picture settings (colour, **brightness,** contrast, **sharpness):** use the **IDEAL** button to select the ideal adjusting functions: **press** the **VIDEO** button. Use the A / V cursor button to select the adfusting function, and **cursor** button •<(•) and/or **cursor button** ^(+) **to** adjust. To **store** in memory, press the red button M. and to switch back to general TV reception, **press** the **TV** button.

Adjusting the sound

Volume: cursor button 4 and/or **cursor button > . When you** operate **the** muting fund. **(loudspeaker button), you** can **use the cursor button to adjust the vol. tor a conn. set ol** earph.

Mode d'emploi abreg6

Programmation des emetteurs

- Recherche automatique (APS): Selectionnez l'emplacement de memoire (p. ex. 1). Appuyez sur la louche **AUTO** (emetteurs **IR).** La **lonction APS** memorise **tous les** programmes de television pouvant etre recus dans votre region. Appuyez sur la louche TV pour passer a la reception de television generale.

  AJustage manuel: Appuyez sur la louche PRG. activez (a fonction au moyen de la louche de curseur ^ . La louche **verte** vous permet d'appeter l'atfichage d'une (requ. ou d'un numero de canal. Ajustez la frequ. a l'aide de la touche ^ / > . Memonsez au mcyen ce la louche **rouge M** et appuyez sur la louche TV pour passer a. la reception de television generale.

  Ajustage fin (FINE TUNE): Appuyez sur la louche **PRG:** activez la fonction a l'aide de la touche **de** curseur **> et** appelez l'affichage des numeros de canal au moyen de la **louche verle.** Procedez a l'ajustage (in de la frequence de canal par FINE TUNE.
- Changemeni du tableau **des** canaux (TAB): Appuyez sur la touche **PRG:** activez la fonction a l'aide de la touche de **curseur > et** appelez l'affichage **des** numeros de canal au **moyen de** la **louche verle,** Selectionnez ie tableau des canaux A ou B au moyen ae la fonction **TAB.**

Triage des emetteurs

- Appuyez sur ta touche **PRG.** selectionnez la fonction **SORT** au moyen **de** la touche **de curseur** T et activez-la par la touche de **cursaur** ^ ; it y a aulomatiquement selection **de** l'emplacement de memoire 1 . Selectionnez le **programme a memoriser a l'aide de la louche de curseur < / > . Memorisez-le en appuyant sur la louche rouge M; il y a automatiquement** selection **de** t'emplacement de memoire **suivant.**

Selection consecutive des programmes

- Selectionnez consecutivement les emplacements **de** programme 1 -99 en appuyant sur **les** touches P A / V ou sur **la** touche de **curseur A / V .**

Reglage de l'image

Format d'image. couleur, luminoslte, contraste et nettete: Appuyez sur la touche **VIDEO** (emetteurs IR). Selectionnez la fonction **de reglage a l'aide de la touche de curseur A / T .** Reglez au moyen de la touche de curseur <(-) / >{+). Appuyez sur 'a louche TV pour passer a >a reception de television generale.

Reglage d'image ideal (couleur, luminosite. contraste, nettete): Selectionnez les fonctions de reglage ideal par la touche IDEAL, appuyez sur la touche VIDEO. Selectionnez la fonction de reglage a l'aide de la touche de curseur A / V et realisez le reglage au moyen de la louche de curseur •<(-) / >(+). Memonsez a. l'aide oe la louche rouge M el appuyez sur la touche **TV** pour **passer** a la reception **de** television generale.

Reglage du son

- Volume sonore; Touche de curseur < >. Lorsque vous supprimez le son (touche de haut-parteur), un casque d'ecoute raccorde peut etre regle au moyen de la louche de curseur.

Istruzioni per l'uso riassuntive

Programmazione delie emittenti

- Ricerca automatica (APS): selezionate una memoria (ad esempio 1). Premele 11 tasto **AUTO** (telecomando). **A questo** punto, la **funzione APS memorizza** tutti i programmi televistvi local! che si possono ncevere. Commutate nuovamente sulla ricezione televisiva standard premendo il tasto **TV.**
- Sintonizzazione manuale: premete il tasto PRG: attivate la funzione premendo il taslo cursore > . Con il **tasto verde e** possibile ricniamare 1'indicazione della frequenza oppure del numero di canale. Sintonizzate sulla frequenza desiderata con il tasto cursore < ' ^ , Memohzzale le operazioni premendo Il **tasto rosso M e** ncommut. suEla ric- telev. stand- prem. i! **TV.**
- Sintonizzazione fine (FINE TUNE): premete il tasto **PRG:** attivate ia funzione premendo il tasto cursore > e nchiamate l'indicazione del numero di canale con il **tasto verde.** Regelate la Sintonizzazione della trequenza del canaie tramite **FINE TUNE.**
- Commutazione delle tabelle del canali (TAB): premete il tasto PRG; attivate la funzione premendo il tasto cursore > e nchiamate l'indicazione dot numero di canale con il tatto verde. Selezionate la tabeita **dei** canali **A oppure B** con la **funzione TAB,**

Selezione delle emittenti

- Premete il tasto PRG, quindi selezionate la funzione SORT premendo il tasto V ed attivatela con il tasto cursore **>•**; a questo punto, verra seleaonaia aulomaticamente la memoria 1 . Setezionate il progr. che desiderate memorizzare **premendo** il tasto •< / ^ . **Memorizzate** le **operaz.** premendo il **tasto rosso M. La memoria suoc.** verra **selez.** contemporaneamente.

Selezione graduale del programma

- Scorrete gradualmente le memorie di programma **da 1 a 99** con i tasti P A / V present! sull'apparecchio **oppure** con il **tasto cursore** A / V .

Regolazioni video

- Formato schermo. **colore, luminosHa, contrasto e nitldezza:** premete il tasto **VIDEO** (telecomando). Selezionate la funzione di regolazione con il tasto cursore A / V e regolatela con it tasto cursore •<(-) / >{-*•)• Ricommutate sulla ncezione televisiva standard premenoo Il tasto TV.
- **Regolazioni video ideal! (colore, luminosita, contrasto.** nitldezza): seiezionate le funzioni di regolazione ideaie premendo il taslo **IDEAL,** quindi premete il tasto **VIDEO.** Scegliete la funzione di regofazione con il tasto **cursore** A / V e regolatela con it tasto cursore <(-) / ^(+). Memonzz. le operaz- prem. il lasio rosso M e ricomm. sulla ncez. telev. stand,prem. il TV.

Regolazioni audio

- **Volume: tasto** cursore <(-) / »•(+). **Qualora attivaste** la **soppressione** dell audio **(tasto con l'al(oparlanle). con** it **tasto cursore** sara **possibile regolare** le cuffie **collegate** aH'apparecchio.

Ersatzteile/ Replacement parts list/ Pieces de rechange/ Elenco delle parti di ricambio

A

Sichefherlsbaufll im Sinn« der Sicherheitsbestmimungen. Diese Teile durfen nur durch Originalteile ersetzt werden f
Sclety components in accordance with existing regulations. These components must only be replaced by original component parts !
Compount d« •«cum» contormement aux reglementations de securite, Ces composants doivent etre uniquement remplaces par des pieces d'origine* f
Component! dl •Jcurezu ai sensi del regolamento di sicurezza. Queste componenti devono venir sostituite unicamente con parti onginalt *

Gegen»Und rtem PHc* mcwM		Bostell-Nr. Order no. Node corn. No. dl rii.
SALORA 21 T 6	A	5434 86 30
SALORA 21 T 7	B	5432 02 00
SALORA 25 T 6	C	5434 86 00
OCEANIC 5554	0	5432 24 00
NOKIA 5575 UK SFN	E	5432 27 40
OCEANIC 5575	F	5432 28 20
NOKIA 6355 VT	G	5434 87 40
NOKIA 6355 NICAM	H	5434 87 60
OCEANIC 6355	1	5434 88 30
NOKIA 6365 VT EE	J	5433 27 50
NOKIA 7155 VT	K	5434 89 00
NOKIA 7155 NICAM	L	54348920
OCEANIC 7155	M	54349040
NOKIA 7165 SAT	N	54332650
NOKIA 7165 UK SFN	0	54332610
NOKIA 7165 VT EE	P	54332620

Gegen»Und rtem PHc* mcwM		Bostell-Nr. Order no. Node corn. No. dl rii.	
(1) Gehlur/ Case/ Boitier/ Scatota			
A		84104051	
B/E/F		84103831	
C		8410 40 80	
D		84103901	
Q/H		841041 40	
1		841041 50	
J		84103690	
K/L		841041 10	
M		84104120	
WW		84103650	
< 2) BlldrAnr*/ Pict lube/ Tube cathod./ Cinescopio			
A/B/0/E/F	A 51 ECO 10x01	4362 21 08	
C/J	A59ECF10x05	43622560	
G/H/1	A59EAF10x01	43642504	
K/l/M	A66EAF10x01	43642804	
N/O/P	A 66 EOF 20x05 SO	4364 28 05	
(3) Haken/ Hook/ Agrafe/ Gando - Emmagn.-Spule/ Degaussing coil/ Bobine de desaimantation/ Bobina di smagnetizzazione			
A/B/C/D/E/F/G/H/1/J/K/L/M/N/O/P		8448 04 70	
(4) Schraube/ Screw/ Vis/ Vite • Blldrohre/ Pia. lube/ Tube cathod./ Cinescopio			
A/B/D/E/1/M	7x32	7864 02 30	
C/G/H/JW/L/N/0/P	7x28	7864 02 21	
F	7x32	7864 02 33	
(5) Enlmagn.-Spul*/Degaussing coil/ Bobine de desaimantation/ Bobina di smagnetizzazione			
A/B/D/E/F		45880811	
C/G/H/1/J		45880813	
K/L/M/N/0/P		4588 08 14	
(f) Erdung\Blldr6nre / Earthing\Picture lube / Mise a la lerre\Tube cathodique / Messa a terra\Cinescopio			
A/B/C/D/E/F/G/H/1/J/K/bM/N/O/P		6141 03 50	
(7) Blldrohr«npl«ne/ Board for picture tube/ Plaque du tube d'image/ Piastra del dnescopio			
A/B/D/E/F/K		5858 20 60	
C/G/H/L/0		5858 20 72	
I/J/M/N/P		5858 20 62	
(8) Hochspannungskabel / High-voltage cable / Cable de haute tension / Cavo d'alto tensJone			
A/B/C/D/E/F/G/H/1/J/K/L/M/N/O/P		48886245	A
< 9) Chassis / Chassis/ Basamenio			
A/8	STEREO PLUS BG N 90"	5864 43 04	
C	STEREO PLUS BG N 110°	5864 43 03	
tXF	STEREO PLUS MULTINORM 90°	58644310	
E	STEREO PLUS 1 N 90'	5864 43 06	
Q/K	STEREO PLUS BG 110° SO	5864 43 21	
H/L	STEREO PLUS BG N 110° SQ	5864 43 22	
1/M	STEREO PLUS MULTINORM 110° SO	5864 43 25	
J/P	STEREO PLUS MULTINORM 110°	5864 43 07	
N	STEREO PLUS 110° SAT N	58644312	
0	STEREO PLUS IN 110°	5864 43 OS	
(10) Milter/ Holder/ Support/ Sostegno - Chassis / Chassis/ Basamento			
A/C/D		8440 05 01	
B/E/F/G/H/I/J/K/L/M/N/O/P		8440 05 31	

Gegenfnd Item Plec* RlumbI		Bnmi-Nr. Order no. N o d« corn. No. dl rif.	
(11) Ruckwand/ Rear cover/ Panrrau amere/ Muro postefiore			
A/D		8430 1830	
B/E/F		8430 1010	
C		8430 1560	
G/H/1		8430 1930	
J		84301710	
K/L/M		8430 1920	
N/O/P		8430 t690	
(12) Schraube/ Screw/ Vis/ Vite - Ruckwand/ Rear cover/ Panneau arriere/ Muro posteriore			
A/B/0/E/F/G/H/I/J/K/L/M/N/O/P	4x20	7874 38 26	
C	4,5x18	78743815	
(13) Abdeckung' Covering/ Couverde/ Copenura - Chassis / Chassis/ Basamento			
B/E'F/I/J/M/O/P		B440 05 51	
G/H/K/L		8440 05 60	
N		84400531	
(14) Lautsprechergitter/ Loudspeaker grille/ Grille pour haut-parleur/ Griglla dell'attopananf			
A/0		8460 1610	
B/E/F		8464 05 70	
C		8460 1790	
G/H/I		8460 20 00	
J		8464 05 60	
K/L/M		6460 1960	
N/O/P		84640550	
(15) Lautsprecher/ Loudspeaker/ Haut-parleur/ Altoparlante			
A/C/D		43120001	
B/E/F	8(110W	4311 34 60	
G/H/1/K/L/M	8tl 10W	4311 2886	
N/QW	80 10W	43112883	
(16) HaMerdir/Fixing spring/Ressort de fixation/ Molla di ritegno			
N/O/JfP		84800010	
(17) Blend*/ Screen/ Cache/ Diaframma			
A/C/D		8455 06 30	
B/E/F'N'0/J/P		8448 10 20	
G/H/1/K/L/M		8455 1 1 20	
(18) Schrltuug/Logo/Graphisme/Oenominazone			
A/C	SALORA	8470 09 50	
B	SALORA	8470 04 20	
B/E/F	NOKIA	8470 01 40	
E/G/H/J/K/UN/0/P	NOKIA	8470 03 80	
D/F/l/M	NOKIA OCEANIC	84701331	
J	NOKIA TEC	8470 14 50	
N/0	ITT DIG	8470 07 30	
P	NOKIA TEC	8470 01 50	
(19) Tuner/ Sinlonizzatore			
A/B/D/E/F/G.'H/1/J/K/L/M/N/P	HYPERBANO SALCO	5823 10 12	
C/0	HYPERBAND	5823 10 14	
(20) Netztaste ' Mains press button / Cfe de secteur / Tasto di rete elettrica			
A/D		8468 02 80	
B/E/F/J/N/0/P		8468 03 00	
C		84680271	
G/H/1/K/L/M		84680310	
(21) Druckfeder/ Pressure spring/ Ressort de pression/ Molla di compressione - Netztaste / Mains press button / Cle de secteur / Taslo di rete elettrica			
A/B/C/D/E;F;G/H/1/J/K/L;M/N/0'P		735254 10	
(22) Tastensatz/ Key set/ Clavier/ Tasliera - (4(ach| (4fold) (41ois) (4volte lanto)			
A/C/D		4188 1051	
B/E/F/G/H/I/J/K/L/M/N/O/P		4188 1090	
(23) Netzschalter / Main switch / Interrupteur secteur / Interruttore di rete elettrica			
A/B/C/D.'E/F/G/H/1/J/K/L/M/N/O/P	SE01	41210002	
(24) SIcherung / Fuse / Fusible / Fusibile 2,5 AT	FE01	43751251	A
SIcherungshalter / HolderVFuse / Supporl'Fusible / Sostegno'.Fusibile	FE02	41570485	
(25) Kopfhdrerbuchse/ Headphone socket/ Douitle pour casque/ Presa di ricevitore a cunia			
A/B/C/D/E/F/G/H/1/J/K/UM/N/O/P	SE03	41441121	
(26) IR-Verstarker/ IR amplifier/ Amplificateur IR/ Amplitiсalore IR			
A/B/C/D/E/F/G/H/I/.MVUM/N/O/P	AE 01	5888 09 74	

(27)	Scharler/ Switch/ CommLrtateur/ Commutalore			
	- (4t»ch) (4told) (4lois) (4volte tamo)			
	A/B/C/D/E/F/G/H/IAVK/L/M/N/0/P	SE 02	41150685	
(28)	**Aufbaurafman/** Mounting frame/			
	Cadre de montage/ Inlelaiatura **di montaggio**			
	- Bedlentall / Operating unit /			
	Bloc de commandos / Unrta di comando			
	A/C/D		84480980	
	B/E/F/N/0		84460481	
	G/H/K/L		84460530	
	VU		84460531	
	J/P		84460482	
(29)	**Netzkabel/** Mains cable/ Cable **sacteur/**			
	Cam per rele elettrica			
	A/B/C/D/F/H/1/J/L/M/P		46886656	A
	BO		4131 2526	&
	G/K/N		4131 25 13	A
	Abtenkk.b*!/ Deflection cable/ **Cable de deviation/**			
	Cavo di deviaaone			
	A/B/C/D/E/F/G/H/1/J/K/L/M/N/O/P	kpL/compl.	48886457	A
	Kabel/ Cable/ Cable/ Cavo			
	• **Lautsprechar/** Loudspeaker/			
	Haut-parieur/ Altoparlante			
	A/C/0		4688 GS 08	A
	B/E/F/G/H/1/J/K/L/M/N/O/P		46886907	A
	- (7pol.) (7pole) (7poles) (7polare)			
	A/B/C/O/E/F/I/J/M/N/O/P		46688046	A
	Bad.'Anlenung / Operating instnJCtions /			
	Mode d'emploi / Instruzioni per I'uso			
	A/B/C		66126354	
	D/F		661263 ia	
	Em		66126315	
	Q		6612 63 57	
	H/L		66126358	
	1/M		66126356	
	J/P		66126316	
	K		66126357	
	N		66126367	
	IR-Sender/ IR transmitter/ **Emetteur IR/**			
	Trasmettitore (R			
	A/B/C/D/E/F/1/JVM/N/O/P	ST1	S6S21811	
	D/G/H/1/K/L/M	ST2	56521630	
	Bitterle-Oeckel / Battery **cover /**			
	Couverds de batterie / Coperohio della batleria			
	A/B/C	SALO	84430514	
	D/F/I/M	OCEANIC	84430794	
	E/G/HW/L/N/O/P	NOKIA	8443 04 74	
	ZF-Modul/ IF module/ **Module IF/ Modulo MF**			
	D/F/1/J/M/N/P	ULTINORM	5825 40 82	
	H«Her\ZF-Modul / HolderMF-Module /			
	SupporfiFI.Module / SostegnoVModulo **MF**			
	D/F/l/J/M/N/P		844811 50	
	Modul/Module MIDI SAT			
	N		58564017	

Chassis / Chassis/ Basamento

STEREO PLUS

- BG 110°	A	5864 43 01
- BGN110°	B	5864 43 03
- BG 90°	C	5864 43 02
- I N 110°	D	5864 43 05
- BG N 90"	E	5864 43 04
- 190"	F	5864 43 06
- MULTI 90°	G	5864 43 10
- 110''SAT N	H	586443 12
- BG 110° SQ	I	5864 43 21
- BGN110° SO	J	5864 43 22
-MULTI 110°	K	5864 43 07
-MULTI HO-	L	5864 43 25

)400 MOS	377S 12 73
C12 MOS	37430004
8 L 08 ACP	3746 00 02
DA 2822 M	3763 1248
TOA2615	3763 1251
aon spring/	736B7017
di trazione	
1366 - N 1 F	3765 14 44
8366 N2 D	3785 00 26
TOA 4662	3765 1369
TDA4665	3741 00 08
TDA 4661	3765 1381
R 02 MOS	378500 10
OKOPPLER	36841033
R 01 MOS	3779 1901
ROGR MOS	3778 10 02
ROGR MOS	3778 10 00
ROGR MOS	3778 1001
R01 MOS	3779 19 10

NF80	ST 24 W 04 CP 1 MOS	3786 00 07
NF«0	MC33164P-5RE	3741 00 05
NH 01/02/03		
A/B/C/D/F/G/M/K/L	TDA 6101 Q MOS	3766 11 **92**
NH01		
E	TEA 5101 A	37861190
ML 01		
A/B/C/D/E/F/1/J	TDA 2545 A	3743 00 06
NO 10	TEA 2164 G	37661170
NO 45	L 78 M 06 CV	3746 00 03
N050		
A/B/C/D/E/F/G/1/JfK/L	L7812CV	37681759
	Spanntadar/ Tension spring/	7368 70 12
	Reason de tenson/ Molla di trazione	
NO 51		
H	LM317T	37661815
	liollertoir/ Insulating film/	8253 17 01
	Feuille isolante/ Foglio isolante	
	Spannfadar/ Tenson spring/	7368 70 12
	Resaort de tansK>n/ Molta di traJbone	
N060		
A/B/C/D/E/F/G/VJWL	**L7805ACV**	**37661785**
	Spennfedef/ Tenson spring/	**7368 70 12**
	Resson de tension/ Molla di trazion*	
N061		
H	LM317T	37661815
	UallTtolle/Insulating film/	8253 17 01
	Feuille isolante/ Foglio isolanie	
	Spannteder/ Tenswn spring/	7368 70 12
	RiMit da tension/ Molla di traziona	
N080	TEA 5170	**37661173**
NP01		
G/L	TDA 8395	3765 14 **45**
NR10		
A/B/C/0/E/F/VJ	CF 70200	3765 00 11
NR30		
A/B/C/D/E/F/1/J	**CP 72306 MOS**	**37791571**
NS 10	TDA 8350 Q	**37631427**
	Spanntedar/ Tension spring/	**7368 70 12**
	Ressort de tension/ Molla di trazione	
NW10		
H	L 7805 ACV	3768 17 85
	SpanmMar/Tensren spring/	73687012
	Resson de tension/ Molla di traziona	
NW1S		
H	LM317T	37681615
	Isollerlolla/ Insulating film/	8253 17 01
	Feuille isolante/ Foglio iwlante	
	Spanntedar/ Tension spring/	**7368** 70 12
	Ressort de tension/ Molla di traziona	
MW30		
H	**L7B12CV**	**37661759**
	Spannfedar/ Tension spring/	**7366 70 12**
	Ressort de tension/ Molla di traziona	
VOM.,		
L	TDA **4665**	3741 00 06
Transistor/ Trinsistron		
VA 80/81	BC *SSS B* Chip	36145422
VA82	8C 848 B Chip	3614 5322
VD42	BC 848 B Chip	3614 5322
VD51	BC 85B B Chip	3614 54 22
VD 52/61		
A/B/C/D/E/F/G/H/JWL	BC848C Chip	36145323
VD62		
A/B/C/D/E/F/G/H/K/L	BC 858 B Chip	3614 54 22
VE06	BC 848 B Chip	3614 53 22
VE07	BC 85S B Chip	3614 54 22
VE 13	BC 848 C Chip	3614 53 23
VE 14	BC 858 B Chip	36145422
VE 24/61	BC 848 B Chip	36145322
VK 11/16	BC 858 B Chip	361454 22
VK22	BC 337 - 25	3614 71 38
VK30		
G/H/K/L	BC 8*8 B Chip	3614 53 22
VK50	S2000AF	3616 1384
	Spannfadar/ Tension spring/	7368 70 12
	Ressort de lension/ Molla di trazione	
VK80	BC 848 B Chip	3614-M^2
VL 11		
A/B/C/D/E/F/1/J	BC 848 B Chip	36145322
VL 17		
C/D/E/F/G/M/1/J.'K/T.	BC846B Chip	36145322
VL18		
G/H/K/L	BC648B Chip	36145322
V025	BUF 405 AX 1	361621 32
	Spannfadar/ Tension spnna/	7368 70 12
	Rassorl da tension/ Molla di trazione	
V071	BC 858 B Chip	36145422
V090		
H	BC848B Chip	36145322
VS51		
A/B/C/D/E/F/H/1/J	BC848B Chip	36145322
VW 20/21		
H	BC848B Chip	36145322
VW24		
H	BC858B Chip	36145422
Diode / Dkxjo		
VD21	82XC5V1	36532218
V081	ZPD18	3653 1731
VD 82/87/86	LL4148F MIN	355603 11

VE05	BZX 84 C 5 V 1	36532218	
VE 08/12/15/51	LI-4146 F MIN	3656 03 1 1	
VE 10			
A/B/C/D/E/F/G/H/1/Jrt.	LED TLPX 5600 AS 1 2 Z	3691 00 02	
K	TLXR4000GT 1 2 RT	3691 00 01	
VE11	BZXC 5 V 1	3653 22 18	
VE16	ZPD 7,5	3653 1 7 3 7	
VE60			
A/B/C/D/E/F/K	TLR 224 TPK 1	3681 1 4 4 5	
G/H/I/J/L	TLPR -XXX	3691 00 02	
VF 18/19/20	1 N4148	3656 08 10	
VF90	LL4148F MIN	3656 03 11	
VM2S			
E	LL4148F MIN	3656 03 11	
VH35			
E	LL4148F MIN	3656 03 11	
VH 45			
E	LL4148F MIN	3656 03 11	
VH 60/67			
A/B/C/D/F/G/H/I/J.K/L	LL4148F MIN	3656 03 11	
VK 10	LL4148F MIN	3656 03 1 1	
VK23	BA 158	3 6 5 6 1 0 1 0	
VKS1	BY 228	3657 55 43	
VK53	LL4148F MIN	3656031 1	
VK87	BA 158	3656 1 0 1 0	
VK61	BYW74	365754 1 8	
VK63	ZPY39	3653 24 23	
VK 67/73	BA158	3656 1 0 1 0	
VK70			
L	LL4148P MIN	3656 03 1 1	
VK71	BYW32	365754 1 3	
VK 74			
E/F/G/H/1/J/K/L	BA158	3656 10 10	
VL18			
E	LL4148F MIN	3656 03 1 1	
V001	TRIAC BT 137-600	3647 1 1 03	
VO 02/03/04/05	1 N 4002	3657 1 1 36	
VO 06,W08,09	1 N 4007	3657 11 41	
VO 13/14/26	BA 158	3656 1 0 1 0	
VO 15/20/21	LL4148F MIN	3656031 1	
V024	BZX 85 C 3 V 0	3653 22 04	
V041			
A/B/C/D/E	BYT56J	3657 53 90	
F/G/H/I/J<K/L	BYT56J	3624 00 01	
V042	ZPD 33	3653 1 7 3 9	
VO 50/60	BYW32	365754 1 3	
VO 51/61			
H	BYV28/100	3657 54 50	
V067	BYV28-100	3657 54 50	
VO 73/86			
E/F/G/H/1/J/K/L	LL4148F MIN	3656 03 11	
V093			
H	LL4148F MIN	3656 03 11	
VO 98			
F/H/1/J/K/L	ZMM 5.1	3653 1 6 3 0	
VS02	1 N 4002	3657 1 1 36	
VS31	ZPD 20	3653 1 7 3 2	
VS32	LL4148F MIN	3656 03 1 1	

Kond«n«»tor/ Capacitor/ Condensaleur/ Condensatore

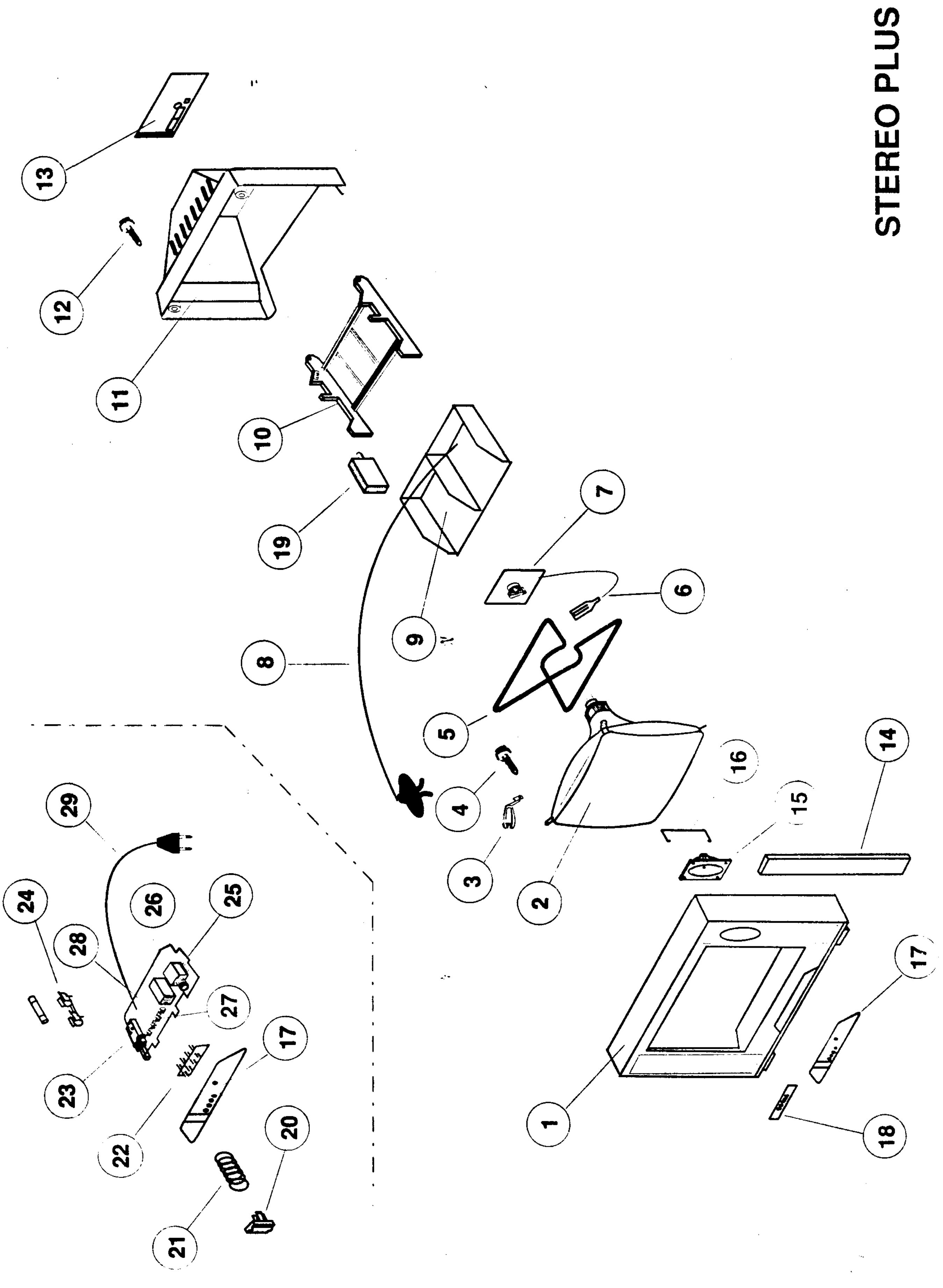
CA86	4700uF 35V	3455 00 04	
CH01	10nF 1250V	3315 C9 67	
CH12			
F/K/L	22nF 400V	33150965	A
CK51			
A/B/O/H	8.2nF 2000V	3385 08 38	A
C/E/F	6.8nF 1600V	33650987	A
G	6.8nF 1.6kV	3345 CO 08	A
1/K/L	8.7nF 1600V	3346 00 02	A
CK52			
A/B/D/H	1.3nF 1600V	3345 00 05	
C/E/F/G/1/K/L	1.5nF 1600V	3345 00 02	
CK54	0,18uF400V	3324 08 29	A
CK55			
A/B/D/H	0.12uF 400V	33241028	A
C/E/F/G	0.18yF400V	3324 08 29	A
1/K/L	0.22uF 400V	3324 10 49	A
CK57	2.2uF160V	342608 1 2	
CK61			
A/B/D/H/1/K/L	27nF 400V	33240835	A
C/6F/G	47nF 400V	3324 10 40	A
CK72	1000pF 35V	3422 05 54	
CK74			
A/B/C/D/E	22uF 250V	3426 05 21	
CO 01	0.33uF 275V	3345 00 04	
CO 02	0.1UF400V	3314 09 73	A
CO 03/04	0.33pF 250V	3324 08 10	A
CO 06/08	1,5nF2KV	3267 09 76	A
CO 09			
A/B/D/H/I/K/L	220pF 385V	3426 09 72	
C/E	150uF385V	3426 08 27	
F/G	150uF 385V	3426 09 71	
CO 25/26/40	330pF 1KV	3267 08 53	A
CO 26/27	680pF 2KV	32670977	A
CO 30	2.2nF 4KV	3261 09 32	A
CO 42	10uF 160V	3426 08 07	
CO 88	lOOOuF 35V	3422 05 54	

WIderstand/ Resistance/ Resistance/ Resistenza

RH03	1 K00.25W	31596048	A
A/B/C/D			
RH09	100U0.25W	3151 45 16	
RH 22/32/42	100K(10.4W	31421248	
RK55	1KnO,25W	3151 45 19	
RK56	2,2(1 0.25W	3151451 1	
RK60	**Fokus/** Focus/ Focalisalion/ Focale	37222010	
RK62	15i2 0.5W	31820001	
RK 68/73	10C10.25W	3151 45 13	
RK72	100U0.25W	3151 45 16	
R001	5.112 8W	31340801	
R002	PTC	3172 12 40	
R016	124KQ 1/8W SMD	31426217	
R021	0.33(i 2.5W	31360001	
R030	8.2MilO,54W	31560970	
RO 74	IQOKflO.IW SMO	31490004	
RO 77	100KQ0.4W	31421248	
R093			
H	7500 0.1W	31490002	
RO 94/96			
H	240QO,1W	31490006	
R095			
H	2.1k(lO,1W	31490008	
RW 15			
H	2400 0.1W	31490006	
RW 16			
H	3,4kn0.1W	31490010	
Potentiometer	olenaometro		
R080	4700	31230001	
Quarz / Quartz			
ZA10	18.432MHZ	4421 32 62	
ZD15	4433618MHz	4421 32 31	
ZR41			
A/B/C/D/E/F/H,	13.875MHz	44213261	
Resonator/ Re			
ZE20	10MHz	4576 00 01	
ZF10	24MHz	4571 00 01	
Filler/ Filtre/ Fl			
ZL01			
A/B/C/E/I	OFW G 3254 K	4555 85 91	
D/F	OFW J 3250	4555 85 68	
ZL 02/22			
A/B/C/0/E/F/I	**250nH TOKO**	4553 00 02	
ZL11			
A/B/C/E/I		4555 87 02	
D/F	6 MHz	4555 87 03	
Spule; Coil/ Bo			
LK55			
A/B/0/H/I/K/L		45161205	
C/E/F/G		45161206	
LK61			
A/B/D/H/I/K/L		45172607	
C/E/F/G		45172608	
Droszel/ Choki			
LA 01		4557 21 01	
LA 02		4557 1 5 5 3	
L»'03		4557 20 78	
LA 32			
E/F/G/H/K/L		4557 21 01	
LA70		4557 1753	
LA 75/76/77		4557 1680	
LI 01		4557 25 01	
LK65		4557 09 31	
LL 11			
A/B/C/D/E/P		4557 1 6 7 4	
LO 01		4557 04 **55**	
LO 15		4557 1 6 3 3	
Ferritpcrle/ Fe			
LK 22,70		4654 1 5 03	
LO 25.-26/50/6		4654 1 5 03	
Transformato			
TK50	Treiber/ Driver/ D'atlaque/ Ecdtatore	4523 1 1 87	
TK 60	ZeHen-Transt. / Hor. line transf. / Transf. de lignes ,' Trasf. di uscita orizz.		
A/B/D/H/I/K/L	M10.10	45150528	A
C/E/F/G	M10-09	45150527	A
TO 30	**Regelubertrager/** Pulse transformer/ Transf. d'impulsion' Trast- impuisio	4523 11 10	
T040	**Wandler** Repealing coil		
A/B/D/H/I/K/L		4523 1 7 1 9	
C/E/F/G		4523 1 7 1 2	
Kabel' Cable			
Ablenkkabel		**4888** 64 57	A
Cavo di deviaz			
Hochspannun		48886245	A
Cable de haul			
Buchse ' Sock			
Kopfhdrerbuc	SE03	4144 11 21	
Douille pour ca			
SCART-Buchs	XD 01/02	41450292	
Reglerle a dou			
Buchse •' Sock	XF 01	4145 22 46	
Sonstiges' be			
Halter Holder		8448 08 40	
- Hochspannu			
Cable de ha			
Bedienteil / 0	STEREO PLUS	5859 03 60	
Bloc de comm			
Bildrdhrenfas	XH01	41554034	
Oouille de lube			

Ersatzteile/ Replacement parts/ Pieces de rechange/ Parti di ricambio

A 34a3


STEREO PLUS
13
12
11
10
19
9
8
7
6
5
4
3
2
16
15
14
1
17
18
29
24
26
25
28
27
23
17
22
20
21

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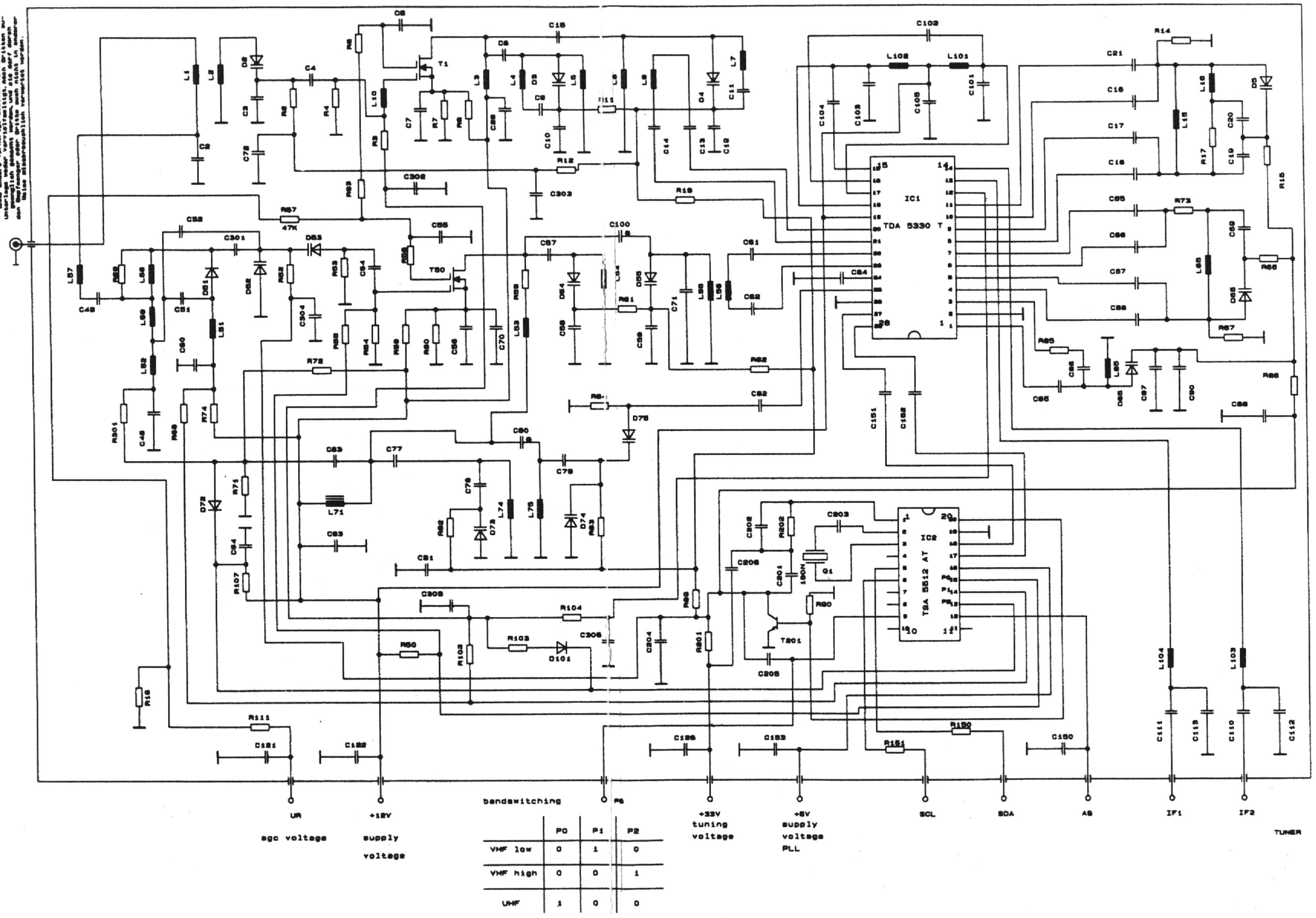

ANTENNE
antenne
IC1
TDA 5330 T
IC2
TSA 5512 AT
UR
agc voltage
+12V
supply
voltage
P6
+33V
tuning
voltage
+5V
supply
voltage
PLL
SCL
SDA
AS
IF1
IF2
TUNER

bandswitching

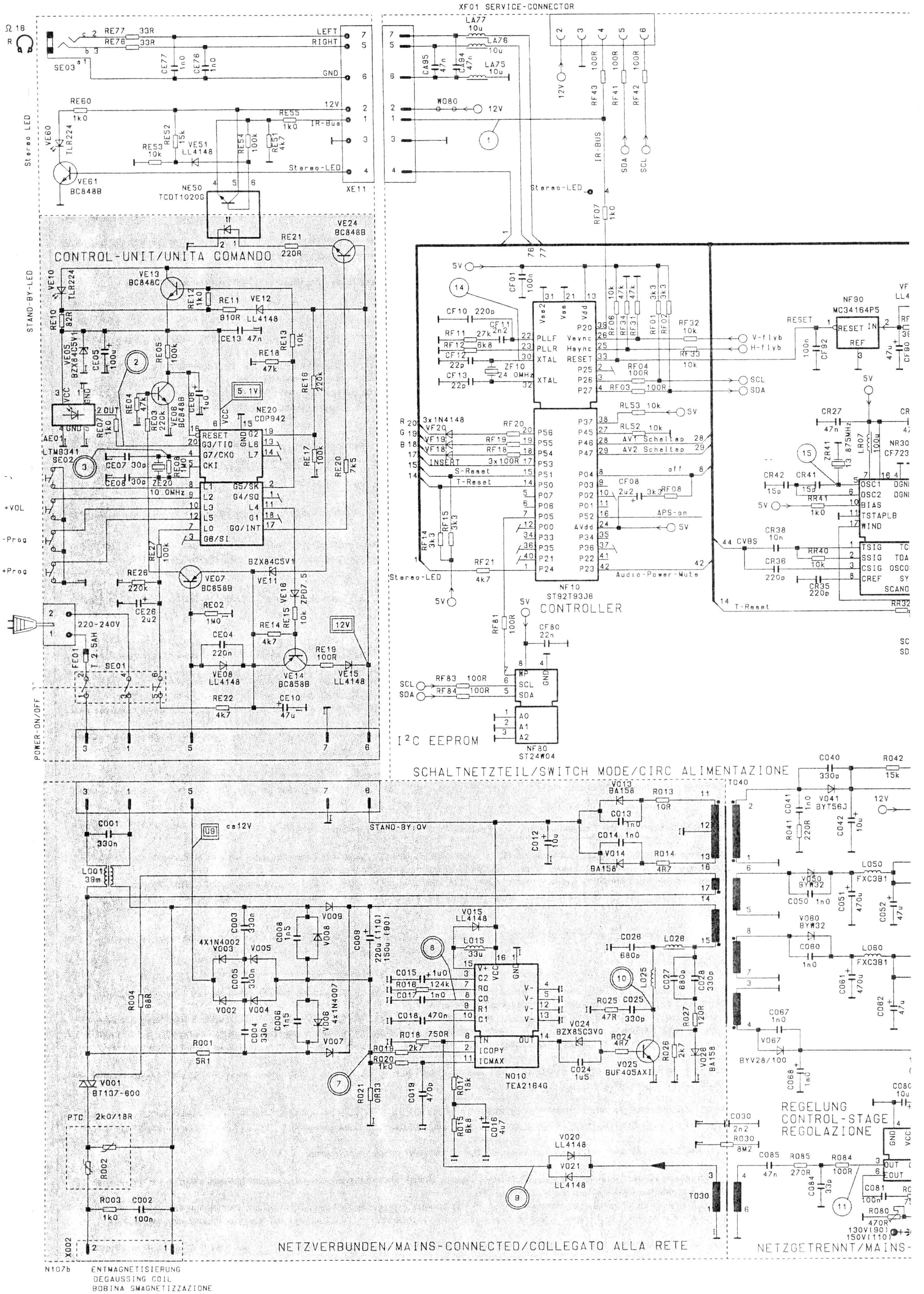
	P0	P1	P2
VHF low	0	1	0
VHF high	0	0	1
UHF	1	0	0

Nach Austausch des Moduls sind keine Abgleicharbeiten erforderlich.

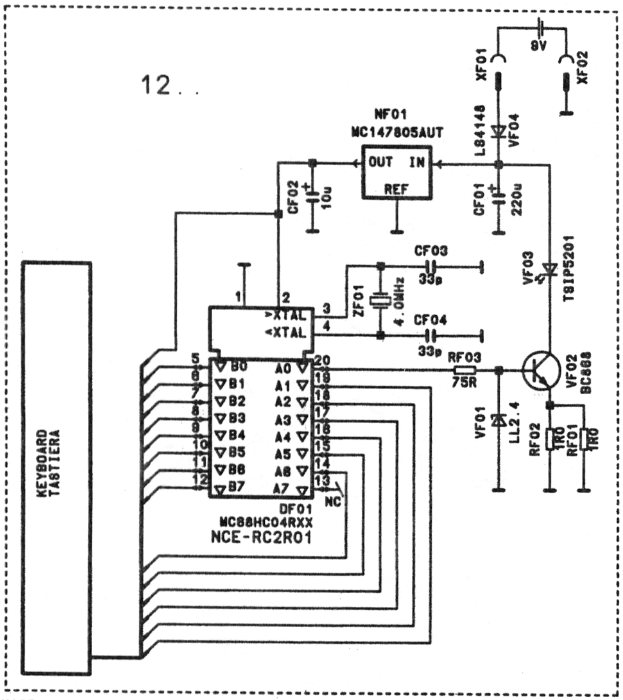
Replacing a defective module does not necessitate realignment.

Aucun ajustage n'est necessaire en cas remplacement du module.

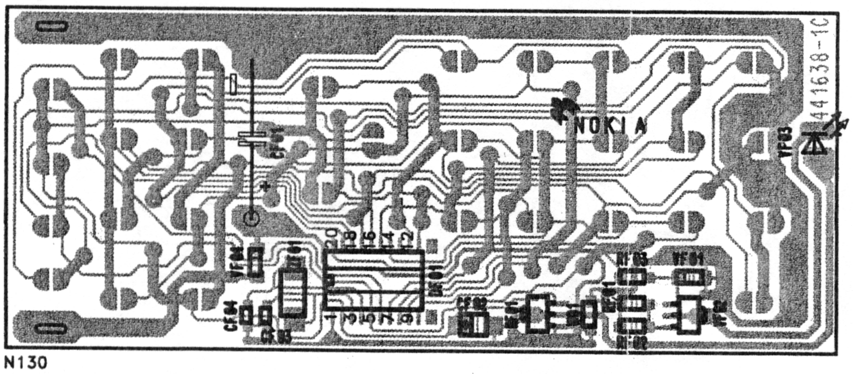
Nel caso di sostituzione del moduli non è necessaria nessuna taratura.


XF01 SERVICE-CONNECTOR
CONTROL-UNIT/UNITA COMANDO
Stereo LED
STAND-BY-LED
POWER-ON/OFF
SE03
RE77 33R
RE76 33R
LEFT
RIGHT
GND
12V
IR-Bus
Stereo-LED
XE11
CE77 1n0
CE76 1n0
RE60 1k0
VE60 TLR224
VE61 BC848B
RE53 10k
RE52 15k
VE51 LL4148
RE54 100k
RE51 4k7
RE55 1k0
NE50 TCDT1020G
RE21 220R
VE24 BC848B
VE13 BC848C
VE10 TLR224
RE10 82R
RE12 1k0
RE11 910R
VE12 LL4148
CE13 47n
RE13 10k
RE18 47k
RE16 220k
VE05 BZX84C5V1
CE05 100u
RE05 100k
VE06 BC848B
CE06 1u0
RE04 47k
RE03 220k
RE07 1k0
AE01 LTM8341
SE02
5.1V
NE20 COP942
RESET
G3/TIO
G7/CKO
CKI
L1 L2 L3 L5 L0 G6/SI
G5/SK G4/SO L4 G1 G0/INT
CE07 30p
CE08 30p
RE08 1M0
ZE20 10.0MHz
RE17 100k
RE20 7k5
+VOL
-Prog
+Prog
RE27 100k
RE26 220k
VE07 BC858B
BZX84C5V1
VE11
VE18 ZPD7.5
RE02 1M0
CE26 2u2
RE14 4k7
RE15 10k
CE04 220n
VE08 LL4148
VE14 BC858B
RE19 100R
VE15 LL4148
12V
RE22 4k7
CE10 47u
220-240V
FE01 T 2.5AH
SE01
LA77 10u
LA76 10u
LA75 10u
CA95 47n
CA94 47n
W080
12V
RF43 100R
RF41 100R
RF42 100R
IR-BUS
SDA
SCL
Stereo-LED
RF07 1k0
5V
CF01 100n
CF10 220p
CF11 2n2
RF11 27k
RF12 6k8
CF12 22p
ZF10 24.0MHz
CF13 22p
PLLF PLLR XTAL XTAL
Vss2 Vss Vdd
P20 Vsync Hsync RESET P25 P26 P27
RF06 10k
RF34 47k
RF31 47k
RF01 3k3
RF02 3k3
RF32 10k
RF33 10k
V-flyb
H-flyb
RF04 100R
RF03 100R
SCL
SDA
RL53 10k
RL52 10k
AV1 Schaltsp
AV2 Schaltsp
off
CF08 2u2
RF08 3k3
APS-on
3x1N4148
VF20 VF19 VF18
RF20 RF19 RF18
3x100R
INSERT
S-Reset
T-Reset
P56 P55 P54 P53 P51 P50 P07 P06 P05 P00 P33 P35 P21 P24
P37 P45 P46 P47 P04 P03 P02 P01 P52 AVdd P34 P36 P22 P23
RF14 3k3
RF15 3k3
RF21 4k7
Audio-Power-Mute
NF10 ST92T93J6
CONTROLLER
RF81 100R
CF80 22n
RF83 100R
RF84 100R
WP SCL SDA GND
A0 A1 A2
NF80 ST24W04
I²C EEPROM
NF90 MC34164P5
RESET
CF92 100n
REF
CR27 47n
ZR41 13.875MHz
LR07 100u
NR30 CF723
CR42 15p
CR41 15p
RR41 1k0
OSC1 OSC2 BIAS TSTAPLB WIND
CR38 10n
44 CVBS
RR40 10k
CR36 220p
CR35 220p
TSIG SSIG CSIG CREF
T-Reset
SCHALTNETZTEIL/SWITCH MODE/CIRC ALIMENTAZIONE
STAND-BY:0V
ca12V
U9
C001 330n
L001 39m
V013 BA158
R013 10R
C013 1n0
C012 10u
C014 1n0
V014 BA158
R014 4R7
C003 330n
C008 1n5
V009
V008
C009 220u(110) 150u(90)
4X1N4002
V003 V005
C005 330n
V002 V004
C004 330n
C006 1n5
V006 4x1N4007
V007
R004 68R
R001 5R1
V015 LL4148
L015 33u
C015 1u0
R016 124k
C017 1n0
C018 470n
V+ C2 VCC GND RO CO R1 C1 V-
IN OUT ICOPY ICMAX
N010 TEA2164G
R018 750R
R019 2k7
R020 1k0
R021 0R33
C019 470p
R017 18k
R015 6k8
C016 4u7
C026 680p
L026
L025
C027 680p
C028 330p
R025 47R
C025 330p
V024 BZX85C3V0
R024 4R7
C024 1u5
V025 BUF405AXI
R027 120R
R026 2k7
V026 BA158
V001 BT137-600
PTC 2k0/18R
R002
R003 1k0
C002 100n
V020 LL4148
V021
LL4148
T030
C030 2n2
R030 8M2
TC40
C040 330p
R042 15k
C041 1n0
V041 BYT56J
R041 220R
C042 10u
12V
V050 BYW32
L050 FXC381
C050 1n0
C051 470u
C052 47u
V060 BYW32
C060 1n0
L060 FXC381
C061 470u
C062 47u
C067 1n0
V067
BYV28/100
C068 1m0
REGELUNG
CONTROL-STAGE
REGOLAZIONE
C085 47n
R085 270R
R084 100R
C084 33p
C081 100n
R080 470R
130V(90)
150V(110)
X002
NETZVERBUNDEN/MAINS-CONNECTED/COLLEGATO ALLA RETE
NETZGETRENNT/MAINS-
N107b
ENTMAGNETISIERUNG
DEGAUSSING COIL
BOBINA SMAGNETIZZAZIONE

ST 1 5652 18 11

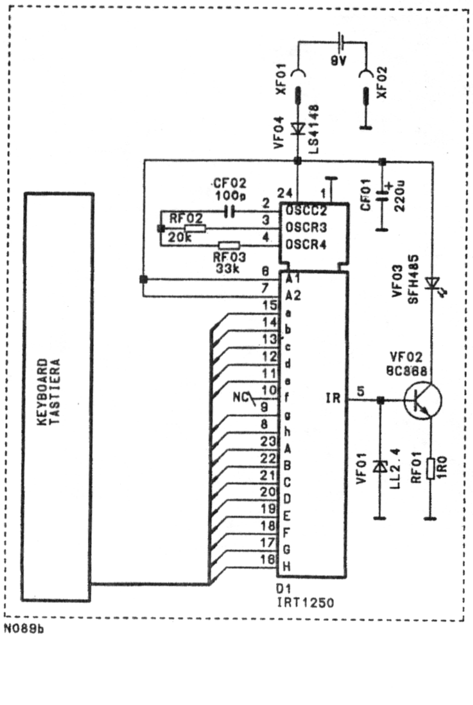

12..
9V
XF01
XF02
LS4148
VF04
NF01
MC147805AUT
OUT IN
REF
CF02
10u
CF01
220u
VF03
TSIP5201
CF03
33p
ZF01
4.0MHz
CF04
33p
>XTAL
<XTAL
RF03
75R
VF02
BC868
VF01
LL2.4
RF02
1R0
RF01
1R0
B0 B1 B2 B3 B4 B5 B6 B7
A0 A1 A2 A3 A4 A5 A6 A7
NC
DF01
MC68HC04RXX
NCE-RC2R01
KEYBOARD
TASTIERA

N087a

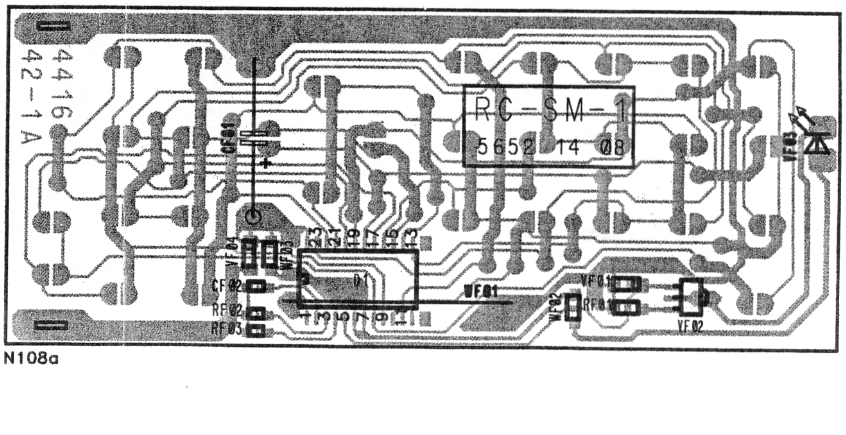

441638-1C
NOKIA
VF03
CF01
DF01
VF04
CF04
CF03
CF02
RF03
VF01
RF01
RF02
VF02

N130

ST 2 5652 18 30

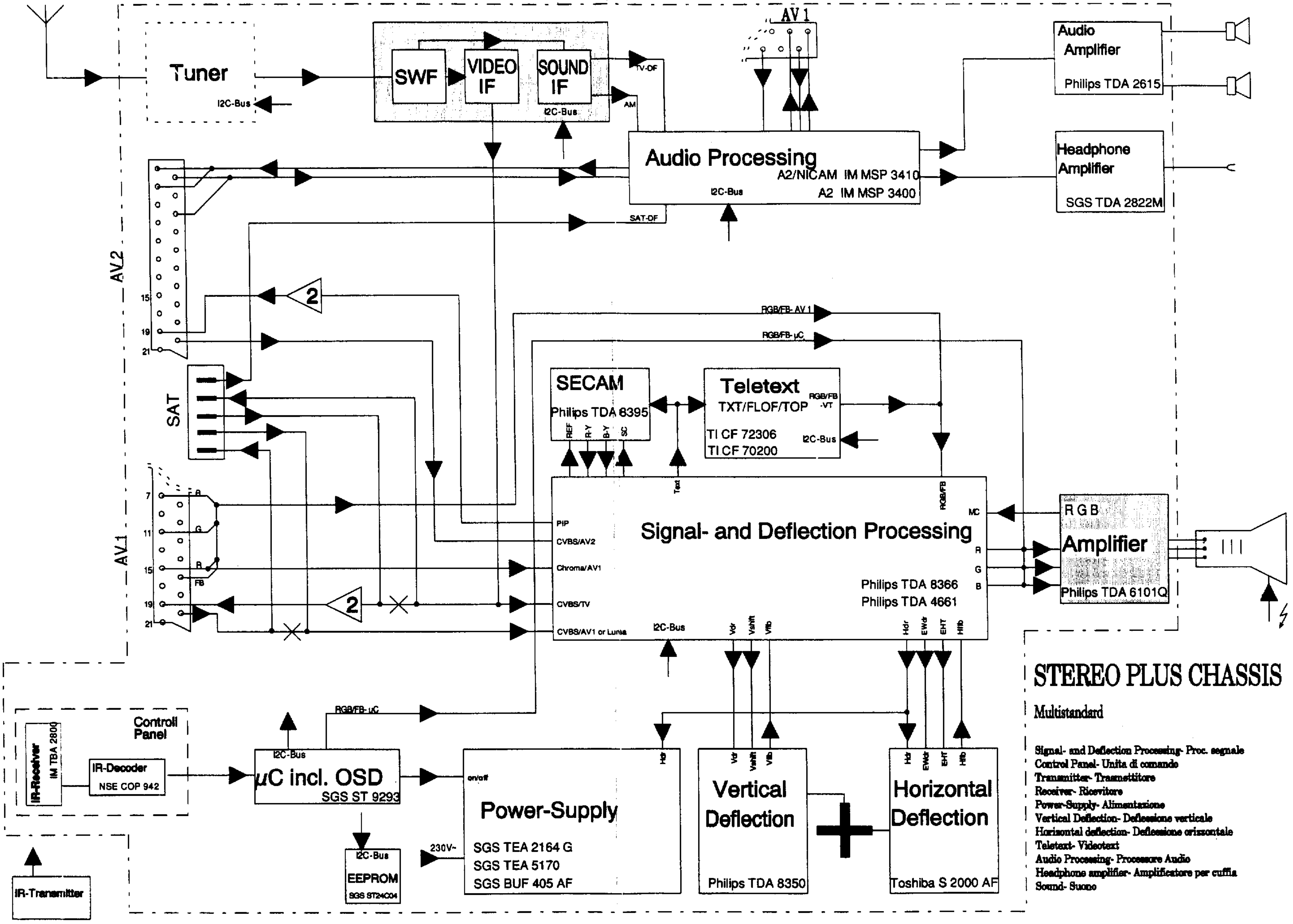

9V
XF01
XF02
VF04
LS4148
CF02
100p
RF02
20k
RF03
33k
OSCC2
OSCR3
OSCR4
CF01
220u
VF03
SFH485
A1
A2
a b c d e f g h A B C D E F G H
NC
IR
VF02
BC868
VF01
LL2.4
RF01
1R0
D1
IRT1250
KEYBOARD
TASTIERA

N089b


4416
42-1A
RC-SM-1
5652 14 08
CF01
VF04
VF03
CF02
RF02
RF03
D1
VF01
VF02
RF01

N108a

A 34a2


Tuner
I2C-Bus
SWF
VIDEO IF
SOUND IF
I2C-Bus
TV-DF
AM
AV 1
Audio Amplifier
Philips TDA 2615
Audio Processing
A2/NICAM IM MSP 3410
A2 IM MSP 3400
I2C-Bus
SAT-DF
Headphone Amplifier
SGS TDA 2822M
AV 2
15
19
21
2
RGB/FB- AV 1
RGB/FB- μC
SAT
SECAM
Philips TDA 8395
REF
R-Y
B-Y
SC
Teletext
TXT/FLOF/TOP
RGB/FB -VT
TI CF 72306
TI CF 70200
I2C-Bus
Text
RGB/FB
AV 1
7
11
15
19
21
B
G
R
FB
2
PIP
CVBS/AV2
Chroma/AV1
CVBS/TV
CVBS/AV1 or Luma
Signal- and Deflection Processing
Philips TDA 8366
Philips TDA 4661
I2C-Bus
Vdr
Vshift
Vfb
Hdr
EWdr
EHT
Hfb
MC
R
G
B
R G B
Amplifier
Philips TDA 6101Q
Controll Panel
IR-Receiver
IM TBA 2800
IR-Decoder
NSE COP 942
IR-Transmitter
RGB/FB- μC
I2C-Bus
μC incl. OSD
SGS ST 9293
I2C-Bus
EEPROM
SGS ST24C04
on/off
230V~
Power-Supply
SGS TEA 2164 G
SGS TEA 5170
SGS BUF 405 AF
Hdr
Vertical Deflection
Vdr
Vshift
Vfb
Philips TDA 8350
Horizontal Deflection
Hdr
EWdr
EHT
Hfb
Toshiba S 2000 AF

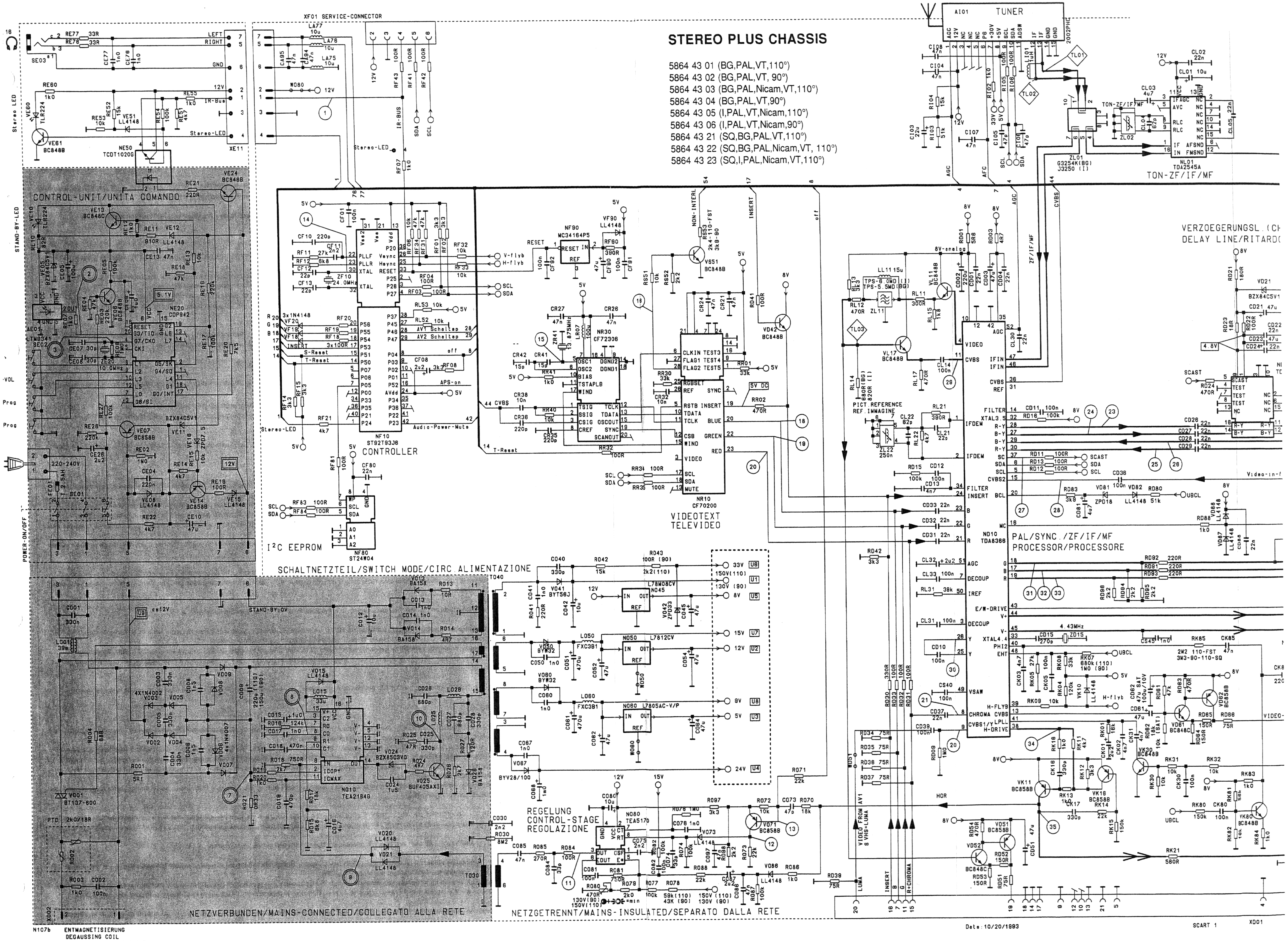
STEREO PLUS CHASSIS

Multistandard

Signal- and Deflection Processing- Proc. segnale
Control Panel- Unita di comando
Transmitter- Trasmettitore
Receiver- Ricevitore
Power-Supply- Alimentazione
Vertical Deflection- Deflessione verticale
Horizontal deflection- Deflessione orizzontale
Teletext- Videotext
Audio Processing- Processore Audio
Headphone amplifier- Amplificatore per cuffia
Sound- Suono

STEREO PLUS CHASSIS

5864 43 01 (BG,PAL,VT,110°)
5864 43 02 (BG,PAL,VT, 90°)
5864 43 03 (BG,PAL,Nicam,VT,110°)
5864 43 04 (BG,PAL,VT,90°)
5864 43 05 (I,PAL,VT,Nicam,110°)
5864 43 06 (I,PAL,VT,Nicam,90°)
5864 43 21 (SQ,BG,PAL,VT,110°)
5864 43 22 (SQ,BG,PAL,Nicam,VT, 110°)
5864 43 23 (SQ,I,PAL,Nicam,VT,110°)


TUNER
A101
2002PHG
TON-ZF/IF/MF
VERZOEGERUNGSL.(CH
DELAY LINE/RITARD(
XF01 SERVICE-CONNECTOR
CONTROL-UNIT/UNITA COMANDO
NE20 COP842
NF10 ST92T9306
CONTROLLER
I²C EEPROM
NF80 ST24W04
NR10 CF70200
VIDEOTEXT
TELEVIDEO
NR30 CF72306
NF90 MC34164P5
PAL/SYNC./ZF/IF/MF
PROCESSOR/PROCESSORE
ND10 TDA8366
NL01 TDA2545A
SCHALTNETZTEIL/SWITCH MODE/CIRC.ALIMENTAZIONE
ND10 TEA2164G
REGELUNG
CONTROL-STAGE
REGOLAZIONE
N080 TEA5170
NETZVERBUNDEN/MAINS-CONNECTED/COLLEGATO ALLA RETE
NETZGETRENNT/MAINS-INSULATED/SEPARATO DALLA RETE
N107b
ENTMAGNETISIERUNG
DEGAUSSING COIL
BOBINA SMAGNETIZZAZIONE
STAND-BY-LED
Stereo LED
POWER-ON/OFF
VOL
Prog
Prog
220-240V
SCART 1
X001

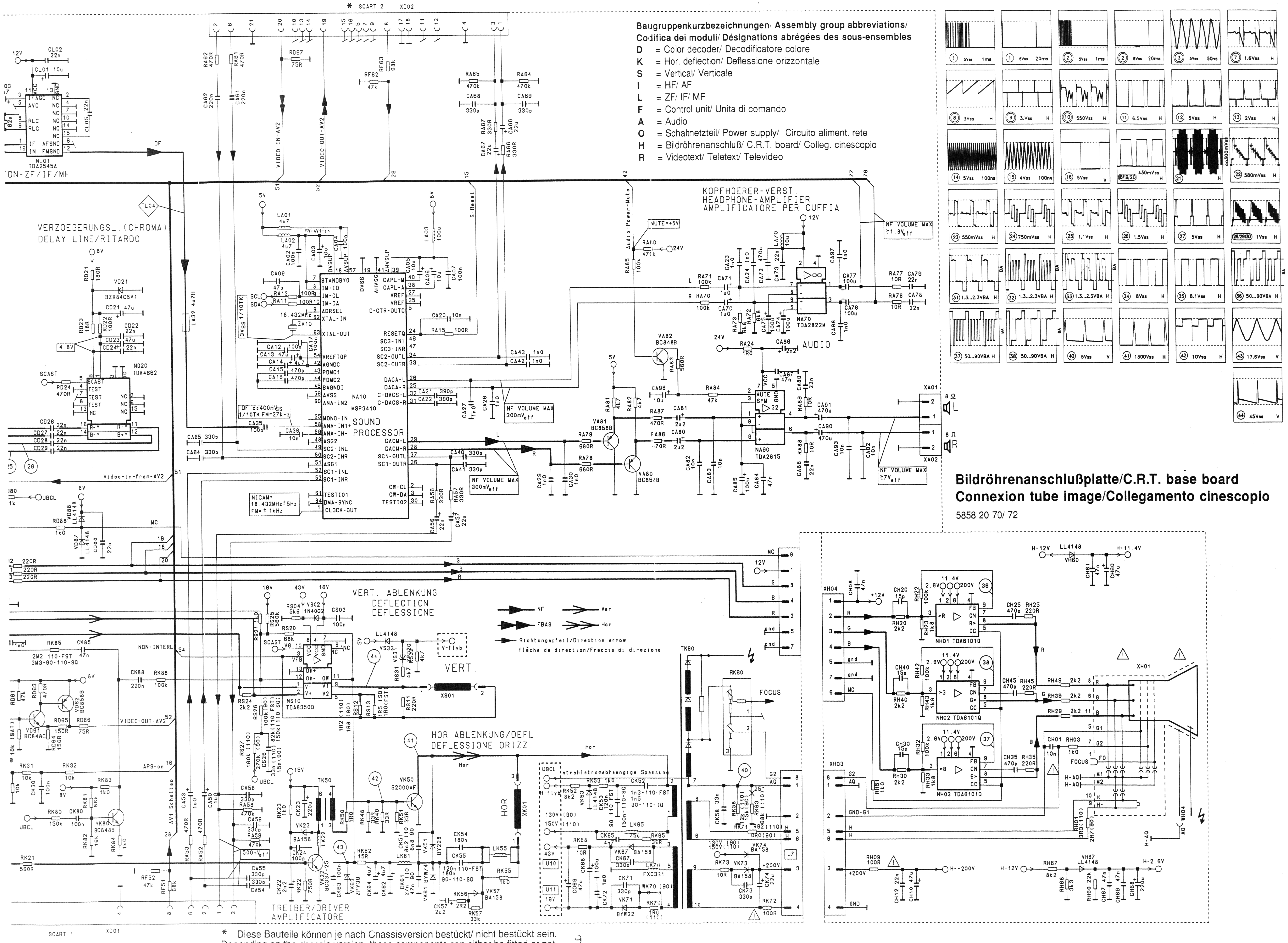
Date: 10/20/1993

7

8

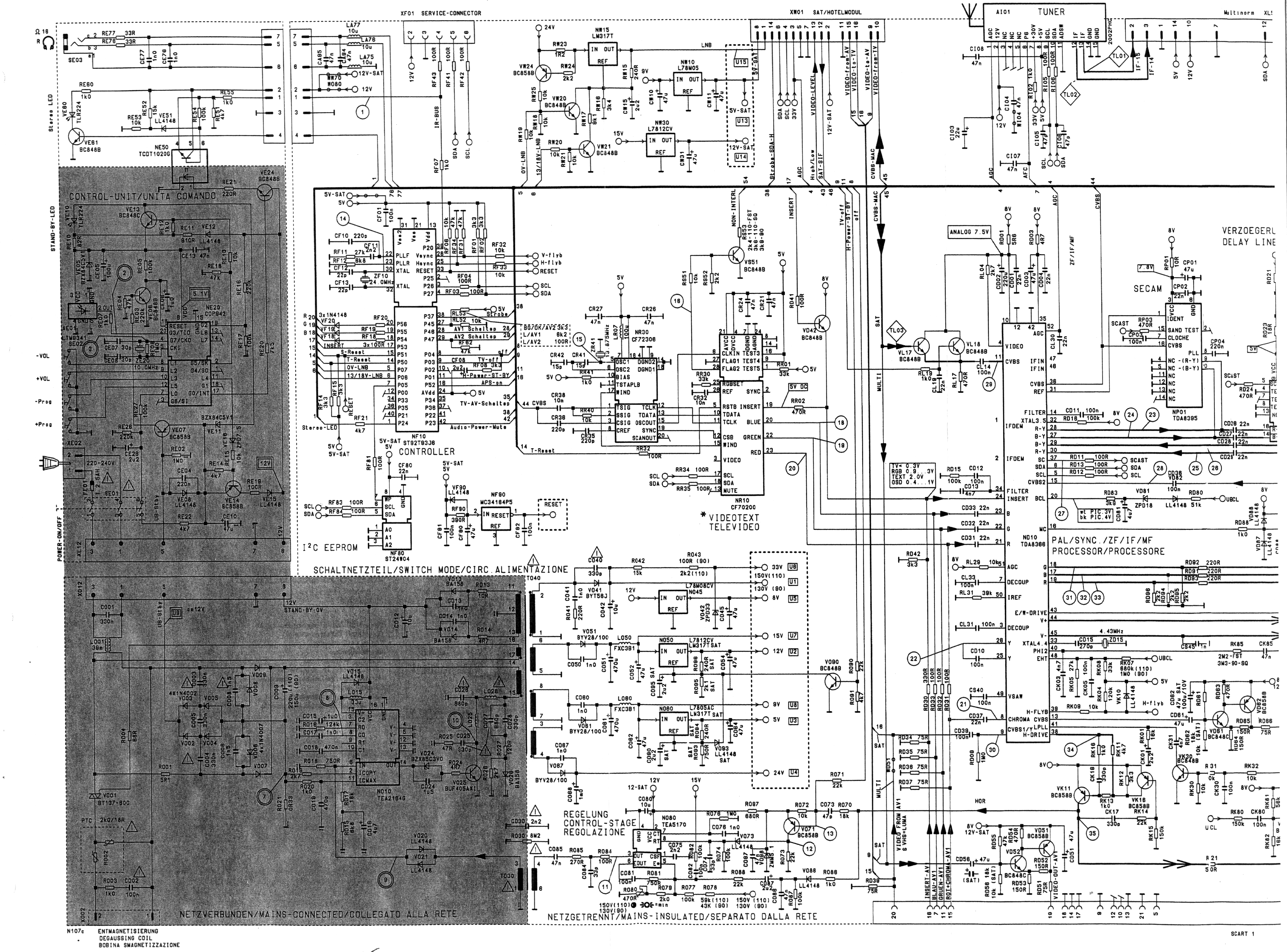
Baugruppenkurzbezeichnungen/ Assembly group abbreviations/ Codifica dei moduli/ Désignations abrégées des sous-ensembles

D = Color decoder/ Decodificatore colore
K = Hor. deflection/ Deflessione orizzontale
S = Vertical/ Verticale
I = HF/ AF
L = ZF/ IF/ MF
F = Control unit/ Unita di comando
A = Audio
O = Schaltnetzteil/ Power supply/ Circuito aliment. rete
H = Bildröhrenanschluß/ C.R.T. board/ Colleg. cinescopio
R = Videotext/ Teletext/ Televideo


* SCART 2 XD02
ON-ZF/IF/MF
TDA2545A
VERZOEGERUNGSL. (CHROMA)
DELAY LINE/RITARDO
TDA4662
VIDEO-IN-AV2
VIDEO-OUT-AV2
S-Reset
Audio-Power-Mute
SOUND PROCESSOR
MSP3410
NICAM= 18 432MHz±5Hz FM=± 1kHz
KOPFHOERER-VERST
HEADPHONE-AMPLIFIER
AMPLIFICATORE PER CUFFIA
TDA2822M
AUDIO
TDA2815
NF VOLUME MAX
8 Ω
L
R
VERT. ABLENKUNG
DEFLECTION
DEFLESSIONE
TDA8350Q
VERT
NF
FBAS
Ver
Hor
Richtungspfeil/Direction arrow
Flèche de direction/Freccia di direzione
HOR ABLENKUNG/DEFL.
DEFLESSIONE ORIZZ.
HOR
FOCUS
TREIBER/DRIVER
AMPLIFICATORE
SCART 1 XD01
XH04
XH03
NH01 TDA6101Q
NH02 TDA6101Q
NH03 TDA6101Q
XH01

Bildröhrenanschlußplatte/C.R.T. base board
Connexion tube image/Collegamento cinescopio
5858 20 70/ 72

* Diese Bauteile können je nach Chassisversion bestückt/ nicht bestückt sein.
Depending on the chassis version, these components can either be fitted or not
Suivant la version du chassis, ccs composants sont montés/ pas montés.
La possibilità di montaggio di questi componenti dipende dalla versione dello chassis


XF01 SERVICE-CONNECTOR
XW01 SAT/HOTELMODUL
AI01 TUNER
Multinorm XL5
2002PHC
VERZOEGERL. DELAY LINE
SECAM
NP01 TDA8395
ZF/IF/MF
ANALOG 7.5V
PAL/SYNC./ZF/IF/MF PROCESSOR/PROCESSORE
ND10 TDA8366
NR10 CF70200
* VIDEOTEXT TELEVIDEO
NR30 CF72306
NF10 ST92T93J6 CONTROLLER
NF80 ST24W04
I²C EEPROM
NF90 MC34164P5
RESET
NW15 LM317T
NW10 L78M05
NW30 L7812CV
CONTROL-UNIT/UNITA COMANDO
NE20 COP842
NE50 TCDT1020G
Stereo LED
STAND-BY-LED
POWER-ON/OFF
-VOL
+VOL
-Prog
+Prog
220-240V
SCHALTNETZTEIL/SWITCH MODE/CIRC. ALIMENTAZIONE
NETZVERBUNDEN/MAINS-CONNECTED/COLLEGATO ALLA RETE
NETZGETRENNT/MAINS-INSULATED/SEPARATO DALLA RETE
NQ10 TEA2164G
N045 L78M08CV
N050 L7812CV LM317T SAT
N080 L7805AC LM317T SAT
REGELUNG CONTROL-STAGE REGOLAZIONE
N080 TEA5170
VQ25 BUF405AXI
TQ40
TQ30
PTC 2k0/18R
N107c ENTMAGNETISIERUNG DEGAUSSING COIL BOBINA SMAGNETIZZAZIONE
SCART 1
TV= 0.3V
RGB 0.9...3V
TEXT 2.0V
OSD 0.4...1V
wt PIC.3V
bk PIC.4V
33V U8
150V(110) U1
130V (90)
8V U5
15V U7
12V U2
8V U8
5V U3
24V U4
VIDEO-from-AV
VIDEO-to-AV
VIDEO-to-TV
VIDEO-from-TV
CVBS-MAC
MULTI
SAT
INSERT-AV
BLAU-AV1
GRUEN-AV1
ROT+CHROMA-AV1
VIDEO-OUT-AV1
VIDEO FROM AV1 S VHS=LUMA
HOR

STEREO PLUS CHASSIS

5864 43 07 (BG/DK,PS,VT,110°)
5864 43 08 (BG/DK,PS,VT,90°)
5864 43 09 (multi,110°)
5864 43 10 (multi,90°)
5864 43 11 (multi,VT,Nicam,Hotel,110°)
5864 43 12 (multi,VT,Nicam,Sat,110°)
5864 43 24 (SQ,BG/DK,PS,VT,110°)
5864 43 25 (SQ,multi,110°)
5864 43 26 (SQmulti,Nicam,VT,Hotel,110°)
5864 43 27 (SQ,multi,VT,Nicam,Sat,110°)

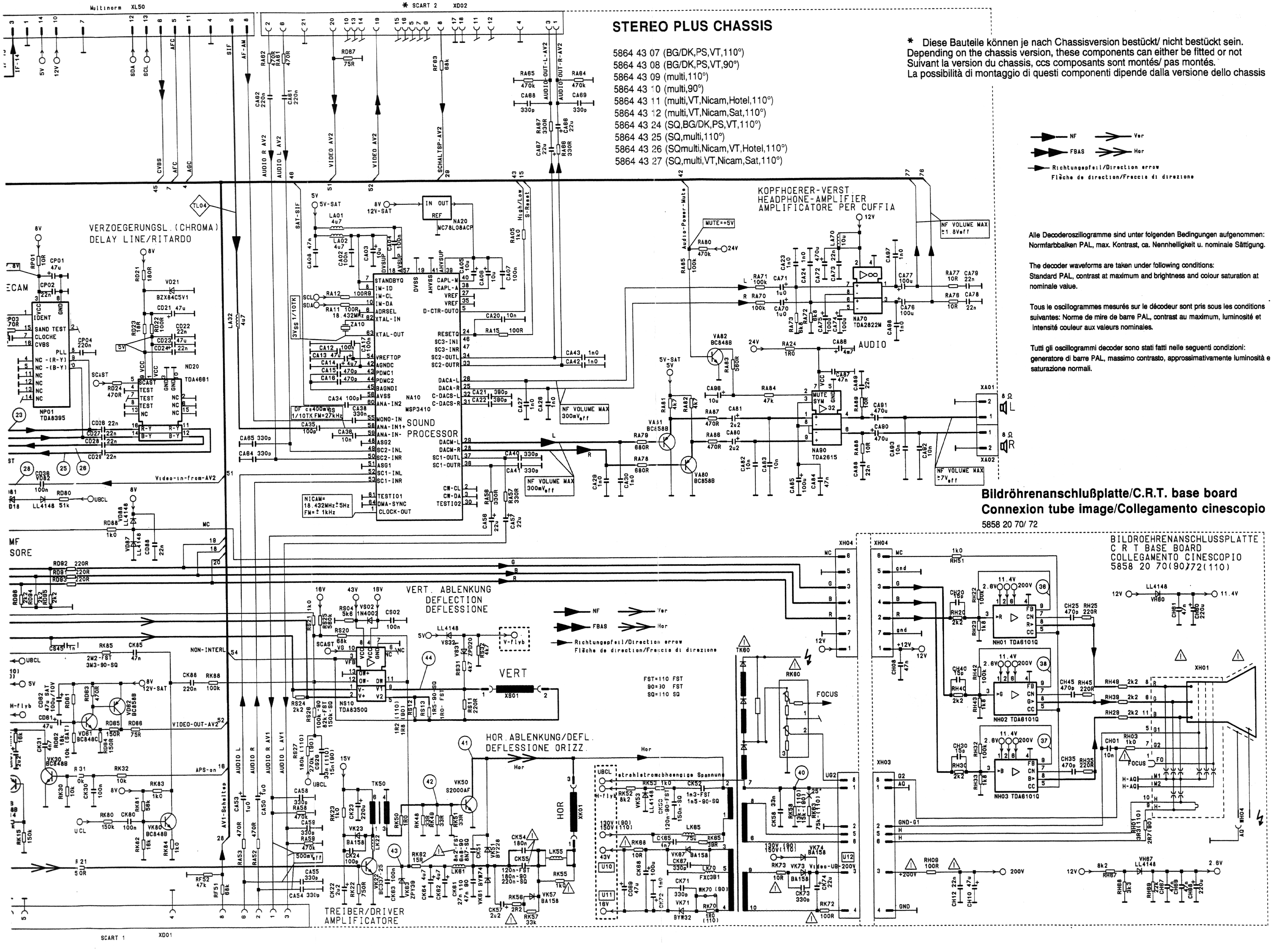
* Diese Bauteile können je nach Chassisversion bestückt/ nicht bestückt sein.
Depending on the chassis version, these components can either be fitted or not
Suivant la version du chassis, ccs composants sont montés/ pas montés.
La possibilità di montaggio di questi componenti dipende dalla versione dello chassis

Alle Decoderoszillogramme sind unter folgenden Bedingungen aufgenommen: Normfarbbalken PAL, max. Kontrast, ca. Nennhelligkeit u. nominale Sättigung.

The decoder waveforms are taken under following conditions: Standard PAL, contrast at maximum and brightness and colour saturation at nominale value.

Tous le oscillogrammes mesurés sur le décodeur sont pris sous les conditions suivantes: Norme de mire de barre PAL, contrast au maximum, luminosité et intensité couleur aux valeurs nominales.

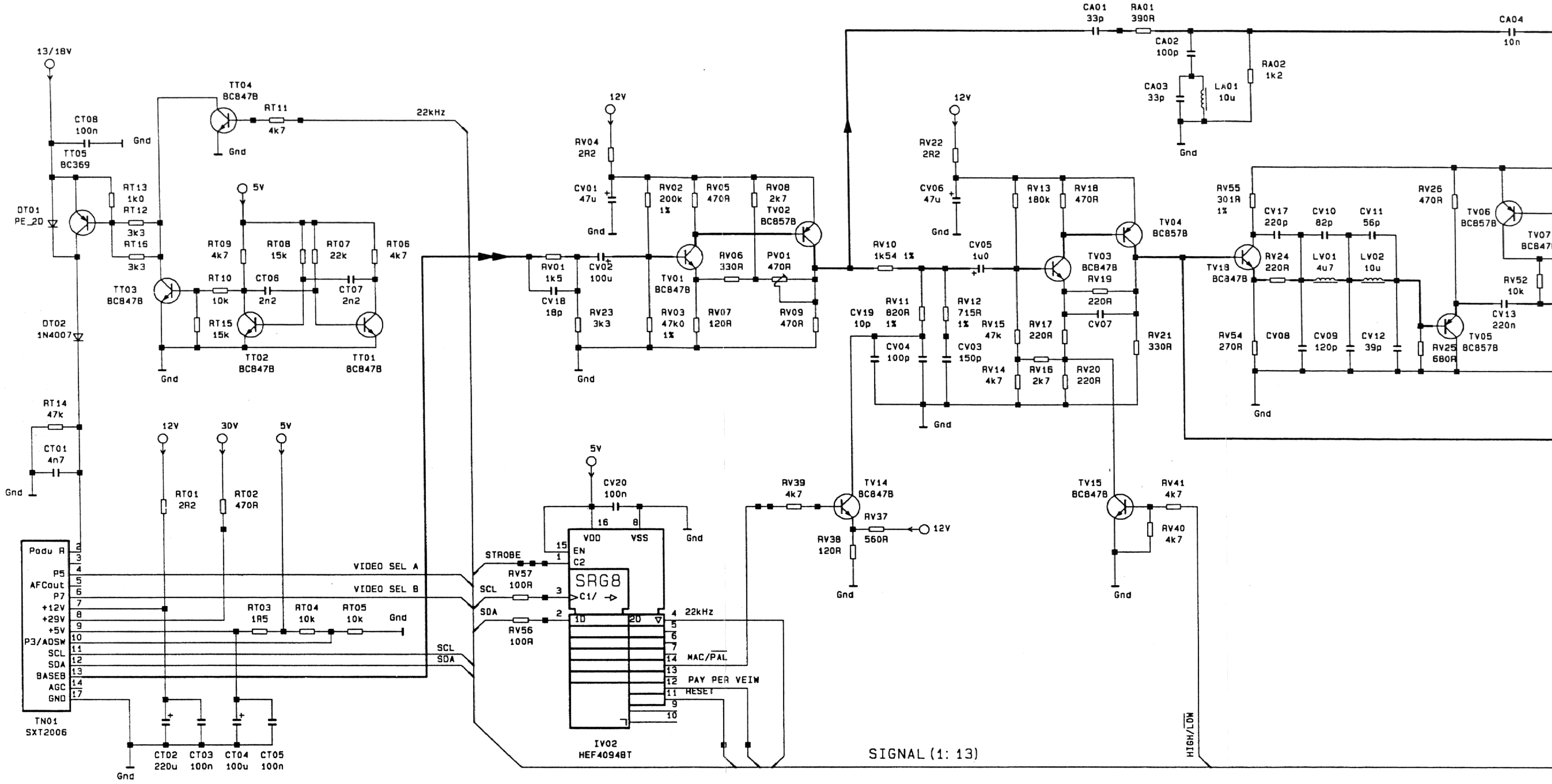
Tutti gli oscillogrammi decoder sono stati fatti nelle seguenti condizioni: generatore di barre PAL, massimo contrasto, approssimativamente luminosità e saturazione normali.

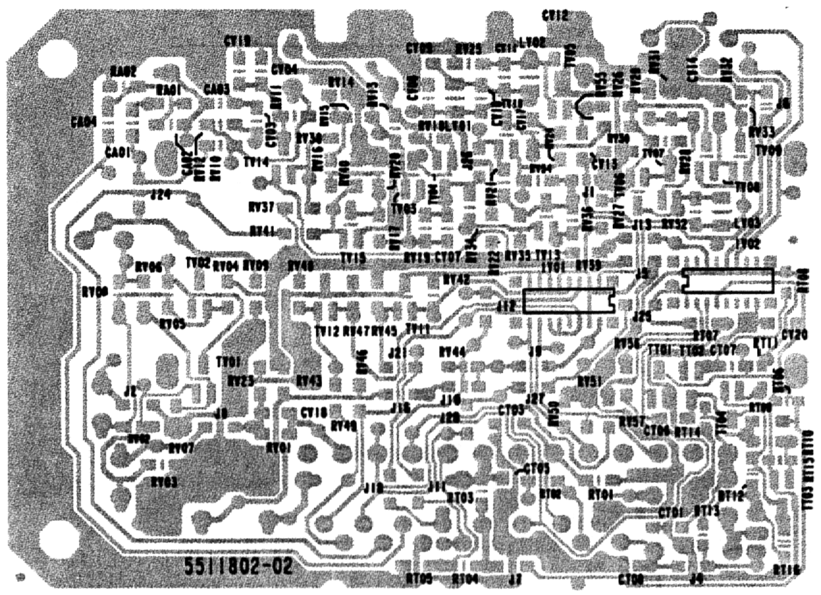

Multinorm XL50
* SCART 2 XD02
NF
Ver
FBAS
Hor
Richtungspfeil/Direction arrow
Flèche de direction/Freccia di direzione
KOPFHOERER-VERST.
HEADPHONE-AMPLIFIER
AMPLIFICATORE PER CUFFIA
NF VOLUME MAX ≥1.8Veff
AUDIO
NA70 TDA2822M
NA80 TDA2615
NF VOLUME MAX ≥7Veff
NF VOLUME MAX 300mVeff
XA01
XA02
8 Ω L
8 Ω R
VERZOEGERUNGSL.(CHROMA)
DELAY LINE/RITARDO
NP01 TDA8395
ND20 TDA4661
NA20 MC78L08ACP
NA10 MSP3410
SOUND PROCESSOR
NICAM= 18.432MHz±5Hz FM=±1kHz
VERT. ABLENKUNG
DEFLECTION
DEFLESSIONE
NS10 TDA8350Q
VERT
XS01
FST=110 FST
90=30 FST
SQ=110 SQ
HOR.ABLENKUNG/DEFL.
DEFLESSIONE ORIZZ.
HOR
XK01
VK50 S2000AF
TREIBER/DRIVER
AMPLIFICATORE
FOCUS
TK60
TK50
SCART 1 XD01
XH04
XH03
NH01 TDA6101Q
NH02 TDA6101Q
NH03 TDA6101Q
XH01
BILDROEHRENANSCHLUSSPLATTE
C R T BASE BOARD
COLLEGAMENTO CINESCOPIO
5858 20 70(90)72(110)

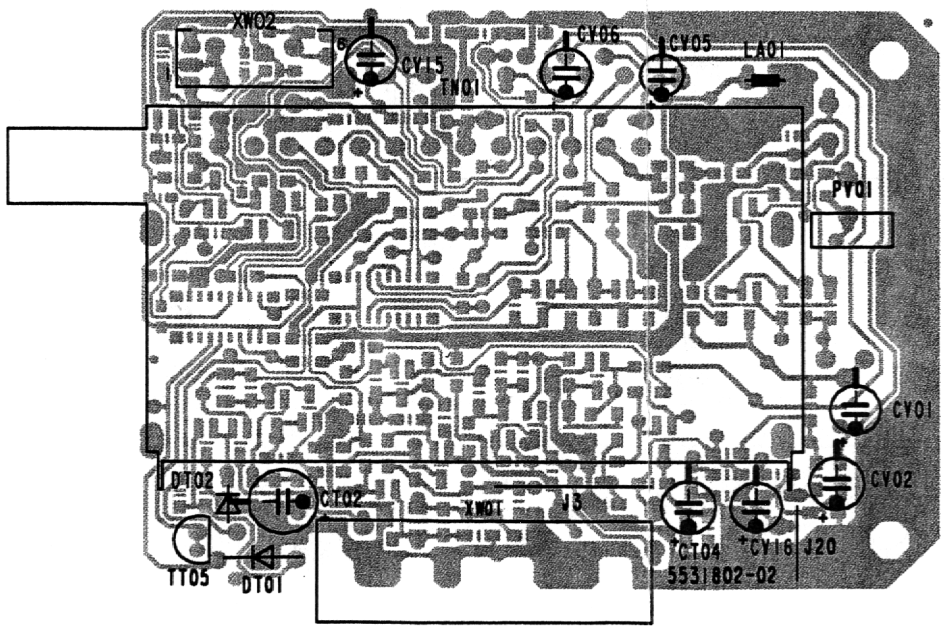
Bildröhrenanschlußplatte/C.R.T. base board
Connexion tube image/Collegamento cinescopio

5858 20 70/ 72

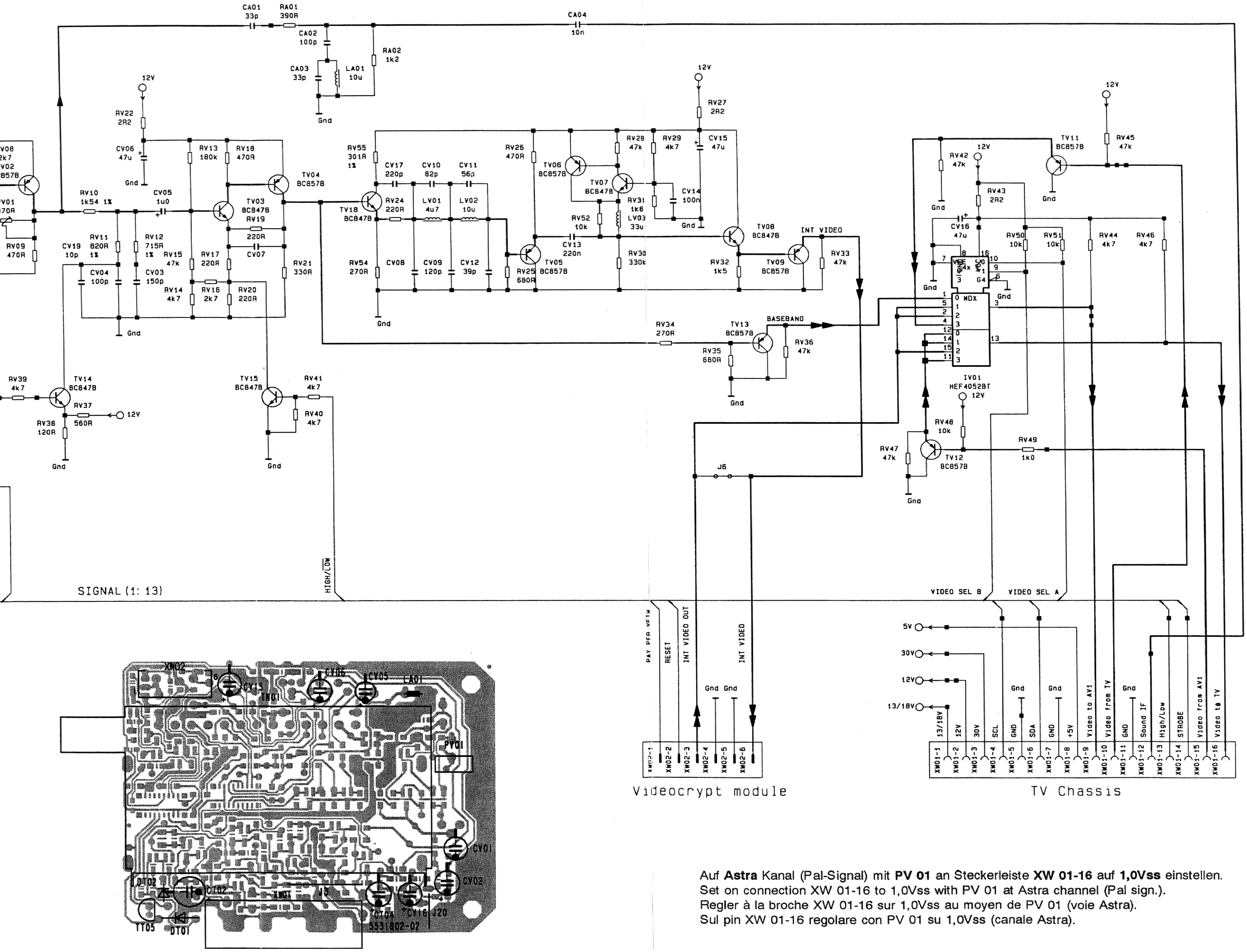
SAT- Modul 5856 40 17


13/18V
CT08 100n
Gnd
TT05 BC369
DT01 PE_20
RT13 1k0
RT12 3k3
RT16 3k3
TT03 BC847B
DT02 1N4007
RT14 47k
CT01 4n7
TT04 BC847B
RT11 4k7
22kHz
5V
RT09 4k7
RT08 15k
RT07 22k
RT06 4k7
RT10 10k
CT06 2n2
CT07 2n2
RT15 15k
TT02 BC847B
TT01 BC847B
12V
30V
RT01 2R2
RT02 470R
RT03 1R5
RT04 10k
RT05 10k
Podu R
P5
AFCout
P7
+12V
+29V
+5V
P3/ADSW
SCL
SDA
BASEB
AGC
GND
TN01 SXT2006
VIDEO SEL A
VIDEO SEL B
CT02 220u
CT03 100n
CT04 100u
CT05 100n
STROBE
RV57 100R
RV56 100R
CV20 100n
VDD
VSS
EN
C2
SRG8
C1/ ->
1D
2D
22kHz
MAC/PAL
PAY PER VEIW
RESET
IV02 HEF4094BT
RV04 2R2
CV01 47u
RV02 200k 1%
RV05 470R
RV08 2k7
TV02 BC857B
RV01 1k5
CV02 100u
CV18 18p
RV23 3k3
TV01 BC847B
RV03 47k0 1%
RV06 330R
RV07 120R
PV01 470R
RV09 470R
RV22 2R2
CV06 47u
RV10 1k54 1%
CV05 1u0
RV11 820R 1%
RV12 715R 1%
CV19 10p
CV04 100p
CV03 150p
RV15 47k
RV13 180k
RV18 470R
RV17 220R
RV14 4k7
RV16 2k7
RV20 220R
TV03 BC847B
RV19 220R
CV07
TV04 BC857B
RV21 330R
RV39 4k7
TV14 BC847B
RV37 560R
RV38 120R
TV15 BC847B
RV41 4k7
RV40 4k7
HIGH/LOW
SIGNAL (1: 13)
CA01 33p
RA01 390R
CA02 100p
CA03 33p
LA01 10u
RA02 1k2
CA04 10n
RV55 301R 1%
CV17 220p
CV10 82p
CV11 56p
TV13 BC847B
RV24 220R
LV01 4u7
LV02 10u
RV54 270R
CV08
CV09 120p
CV12 39p
RV26 470R
TV06 BC857B
TV07 BC847
RV52 10k
CV13 220n
RV25 680R
TV05 BC857B




XW02
CV15
TN01
CV06
CV05
LA01
PV01
CV01
CV02
DT02
CT02
TT05
DT01
XW01
J3
CT04
CY16
J20
5531802-02

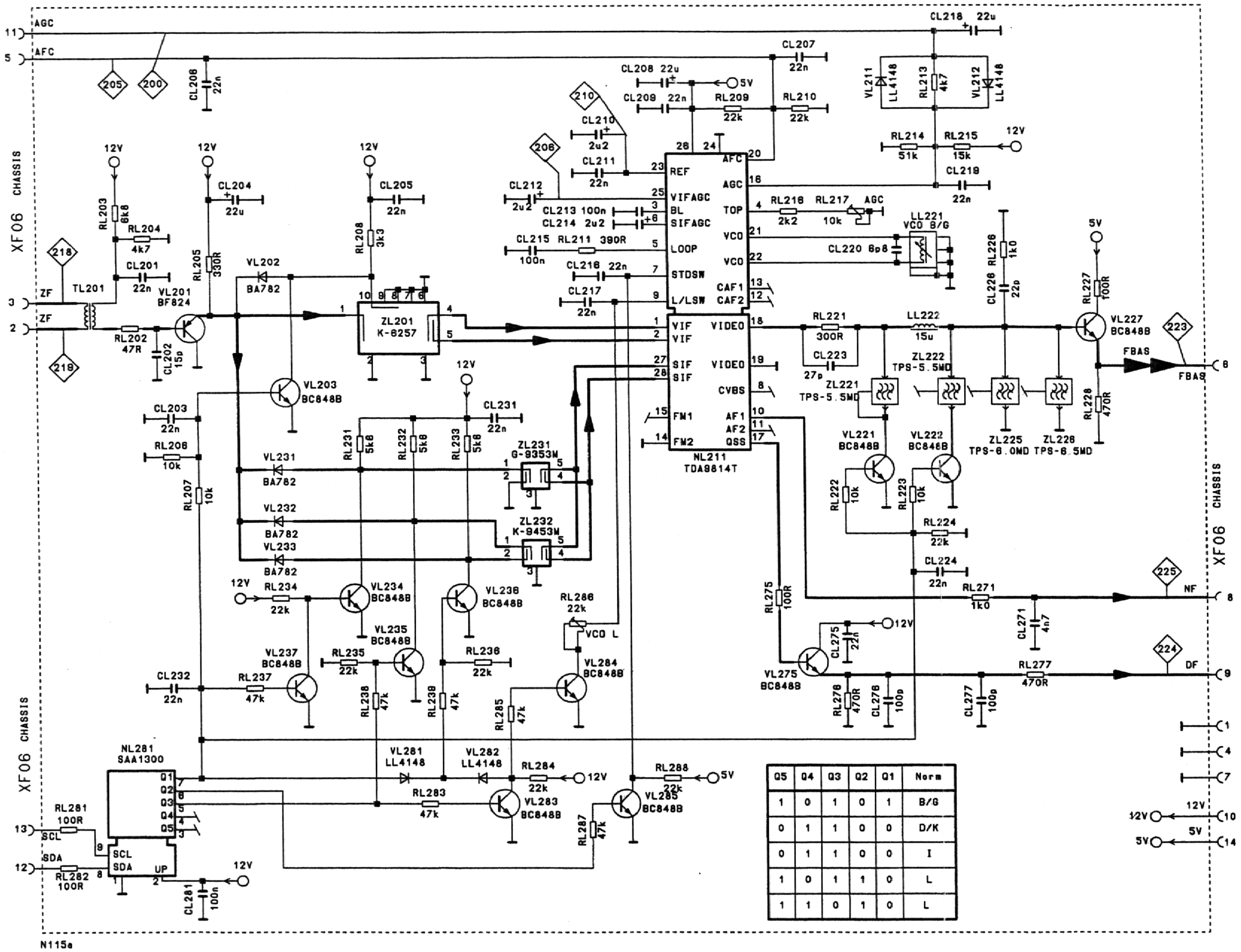
SAT- Modul 5856 40 17


CA01 33p
RA01 390R
CA02 100p
CA03 33p
LA01 10u
RA02 1k2
CA04 10n
12V
RV22 2R2
CV06 47u
Gnd
RV10 1k54 1%
CV05 1u0
RV13 180k
RV18 470R
TV03 BC847B
TV04 BC857B
RV19 220R
CV07
RV11 820R 1%
RV12 715R 1%
RV15 47k
RV17 220R
RV21 330R
CV19 10p
CV04 100p
CV03 150p
RV14 4k7
RV16 2k7
RV20 220R
RV09 470R
RV39 4k7
TV14 BC847B
RV37 560R
RV38 120R
TV15 BC847B
RV41 4k7
RV40 4k7
RV55 301R 1%
TV18 BC847B
CV17 220p
RV24 220R
CV10 82p
LV01 4u7
CV11 56p
LV02 10u
RV54 270R
CV08
CV09 120p
CV12 39p
RV26 470R
TV06 BC857B
TV07 BC847B
RV28 47k
RV29 4k7
RV27 2R2
CV15 47u
CV14 100n
RV31 1k8
LV03 33u
RV52 10k
CV13 220n
TV05 BC857B
RV25 680R
RV30 330k
TV08 BC847B
RV32 1k5
TV09 BC857B
INT VIDEO
RV33 47k
RV34 270R
TV13 BC857B
BASEBAND
RV35 680R
RV36 47k
TV11 BC857B
RV45 47k
RV42 47k
RV43 2R2
CV16 47u
RV50 10k
RV51 10k
RV44 4k7
RV46 4k7
MDX
IV01 HEF4052BT
RV48 10k
RV47 47k
TV12 BC857B
RV49 1k0
J6
SIGNAL (1: 13)
HIGH/LOW
VIDEO SEL B
VIDEO SEL A
5V
30V
12V
13/18V
PAY PER VIEW
RESET
INT VIDEO OUT
Gnd Gnd
INT VIDEO
XW02-1
XW02-2
XW02-3
XW02-4
XW02-5
XW02-6
Videocrypt module
13/18V
12V
30V
SCL
GND
SDA
GND
+5V
Video to AV1
Video from TV
GND
Sound IF
High/Low
STROBE
Video from AV1
Video to TV
XW01-1
XW01-2
XW01-3
XW01-4
XW01-5
XW01-6
XW01-7
XW01-8
XW01-9
XW01-10
XW01-11
XW01-12
XW01-13
XW01-14
XW01-15
XW01-16
TV Chassis
XW02
CV15
TM01
CV06
CV05
LA01
PV01
CV01
CV02
DT02
CT02
XW01
J3
CT04
CV16
J20
TT05
DT01
5531 802-02

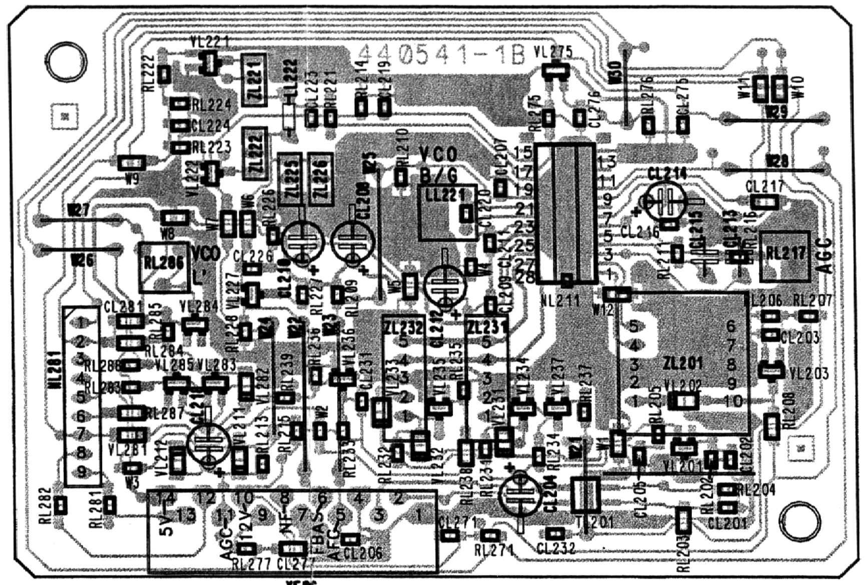
Auf **Astra** Kanal (Pal-Signal) mit **PV 01** an Steckerleiste **XW 01-16** auf **1,0Vss** einstellen.
Set on connection XW 01-16 to 1,0Vss with PV 01 at Astra channel (Pal sign.).
Regler à la broche XW 01-16 sur 1,0Vss au moyen de PV 01 (voie Astra).
Sul pin XW 01-16 regolare con PV 01 su 1,0Vss (canale Astra).

Multinorm Modul

5825 40 82


XF06 CHASSIS
AGC
AFC
ZF
TL201
VL201 BF824
ZL201 K-6257
VL202 BA782
VL203 BC848B
NL211 TDA9814T
REF
VIFAGC
BL
SIFAGC
LOOP
STDSW
L/LSW
VIF
SIF
FM1
FM2
AFC
AGC
TOP
VCO
CAF1
CAF2
VIDEO
CVBS
AF1
AF2
QSS
LL221 VCO B/G
ZL231 G-9353M
ZL232 K-9453M
VL231 BA782
VL232 BA782
VL233 BA782
VL234 BC848B
VL235 BC848B
VL236 BC848B
VL237 BC848B
RL286 22k VCO L
VL284 BC848B
VL281 LL4148
VL282 LL4148
VL283 BC848B
VL285 BC848B
NL281 SAA1300
SCL
SDA
UP
ZL221 TPS-5.5MD
ZL222 TPS-5.5MD
ZL225 TPS-6.0MD
ZL226 TPS-6.5MD
LL222 15u
VL221 BC848B
VL222 BC848B
VL227 BC848B
VL275 BC848B
FBAS
NF
DF
12V
5V
N115a

Q5	Q4	Q3	Q2	Q1	Norm
1	0	1	0	1	B/G
0	1	1	0	0	D/K
0	1	1	0	0	I
1	0	1	1	0	L
1	1	0	1	0	L


440541-1B
VCO B/G
VCO L'
NL211
ZL201
AGC
XF06

N142

ZF-Modul/ IF module/
Module IF/ Modulo MF
- STEREO PLUS MULTINORM **5825 40 82**

Integr. Schaltung/ Integrated circuit/ Circuit intégrés		
NL 211	TDA 9814 T	3741 00 04
NL 281	SAA 1300	3779 12 17
Transistor/ Transistron		
VL 201	BF 824 Chip	3612 07 51
VL 203/221/222/227/234/235/ 236/237/275/283/284/285	BC 848 B Chip	3614 53 22
Diode / Diodo		
VL 202	BA 782 MIN	3656 04 20
VL 211/212/281/282	LL 4148 F MIN	3656 03 11
VL 231/232/233	BA 782 MIN	3656 04 20
Potentiometer/ Potentiométre/ Potenziometro		
RL 217	10 kΩ	3111 26 19
RL 286	22kΩ	3123 00 04
Transformator/ Transformer/ Transformateur/ Trasformatore		
TL 201	SMD	4523 11 25
Drossel/ Choke/ Bobine de self/ Bobina		
LL 222	15µH	4557 16 74
Filter/ Filtre/ Filtro		
LL 221	250 NH TOKO	4553 00 02
ZL 201	OFW K 6257	4555 85 84
ZL 221/222	5,5 MHz	4555 84 14
ZL 225	6 MHz	4555 84 15
ZL 226	6,5 MHz	4555 84 16
ZL 231	OFW G 9353 M	4555 85 87
ZL 232	OFW K 9453 M	4555 85 86

Bild- Referenz- Abgleich (Multinorm-Modul, Chassis 5864 43 07..12,24..27))

Norm B/G, I

1. **Programm**taste drücken.
2. Mit Curser ◀▶ auf "TV-Prog" stellen.
3. Mit den **Zifferntasten** einen Kanal z.B. Kanal **38** eingeben.
4. Gleichspannungsmeßgerät an **TP 205** dann mit **LL 221** auf **2,5V** abgleichen.

Norm L'

1. **Programm**taste drücken.
2. Mit Curser ◀▶ auf "TV-Prog" stellen.
3. Mit den **Zifferntasten** einen mittleren Kanal z.B. Bereich 1 Kanal **C** (63,75 MHz) eingeben.
4. Gleichspannungsmeßgerät an **TP 205** dann mit **RL 286** auf **2,5V** abgleichen.

Equilibrage d'image de référence (Multinorm module, chassis 5864 43 07..12,24..27))

Norm B/G, I

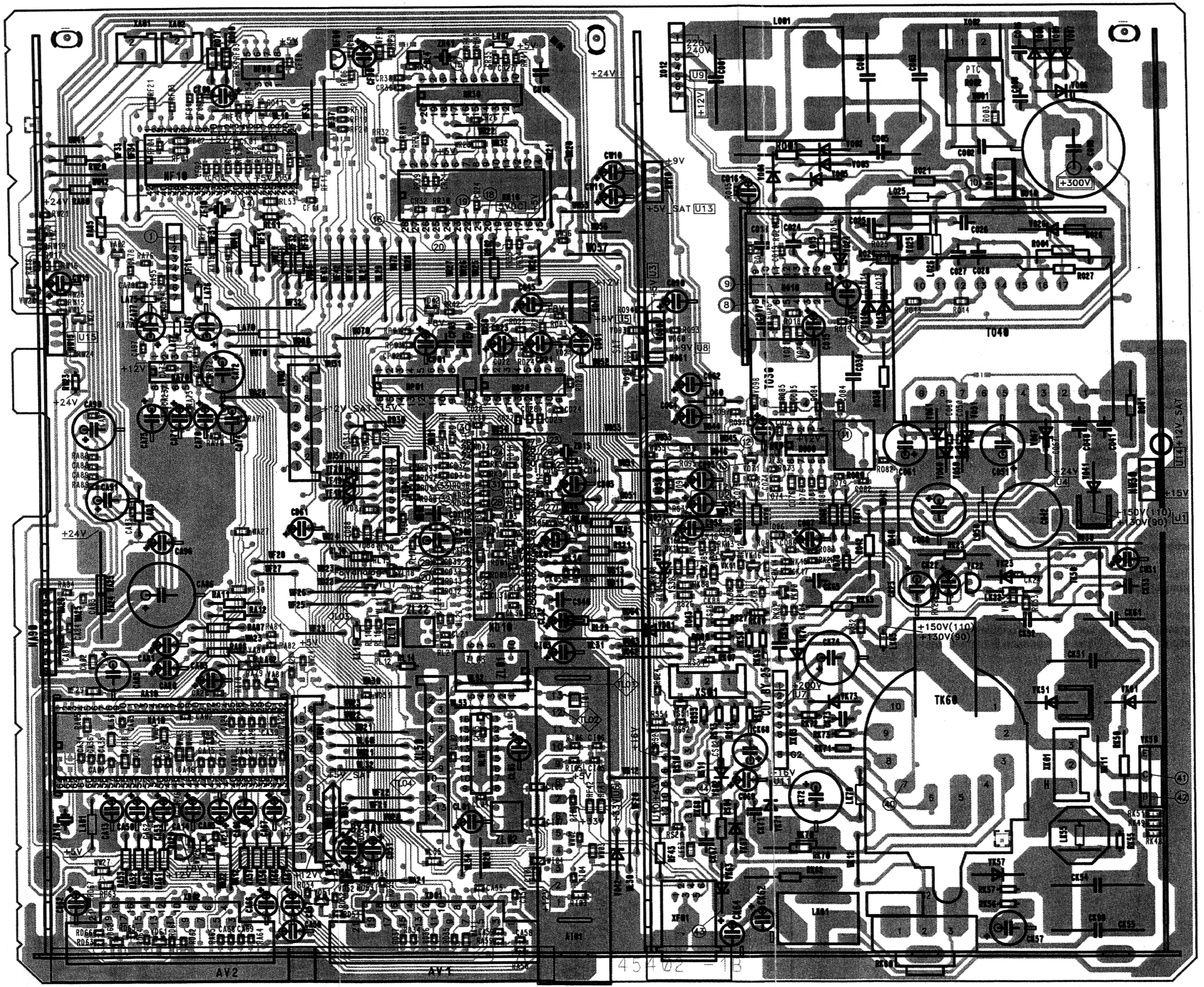
1. Appuyez sur la touche de programme.
2. Ajustez "TV-Prog" au moyen du curseur ◀▶.
3. Entrez un canal moyen, p. ex. le canal 38 (607,25 MHz) au moyen des touches numériques.
4. Ajustez 2,5V au moyen de LL 221 (oscilloscope à la broche TP 205).

Norm L'

1. Appuyez sur la touche de programme.
2. Ajustez "TV-Prog" au moyen du curseur ◀▶.
3. Entrez un canal moyen, p. ex. le canal C (63,75 MHz) au moyen des touches numériques.
4. Ajustez 2,5V au moyen de RL 286 (oscilloscope à la broche TP 205).

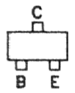
◀ **Reparaturtips/ Instructions for repair work**
Consigli per le riparazioni/ Conseils de réparation

A 34a


+300V
PTC
T040
T030
TK60
+150V(110)
+130V(90)
+12V_SAT
+15V
+24V
+5V_SAT
+9V
220-240V
AV1
AV2
45402 -1B
N139

Chassis

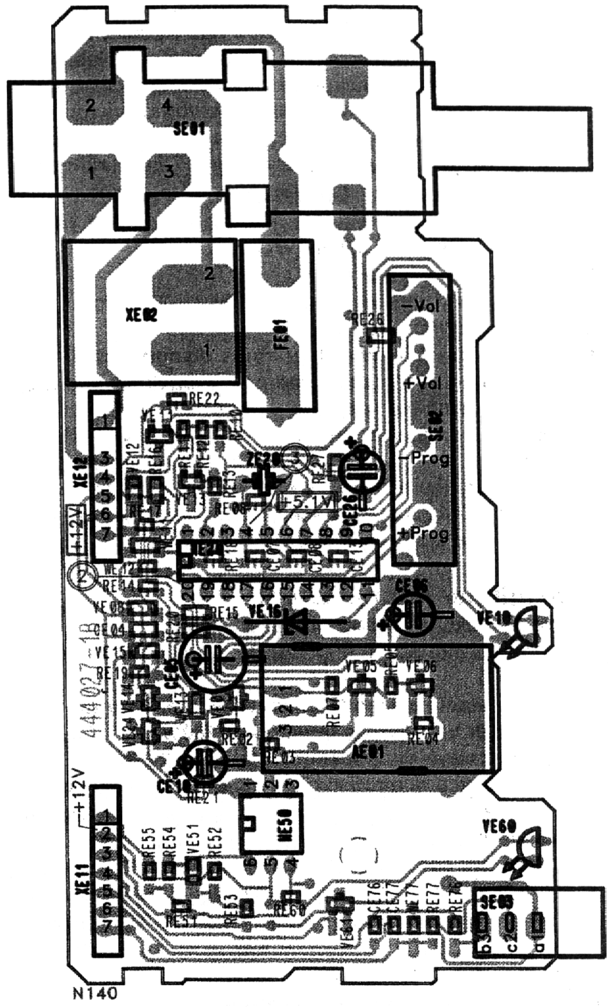
6611 73 19 (9408) S

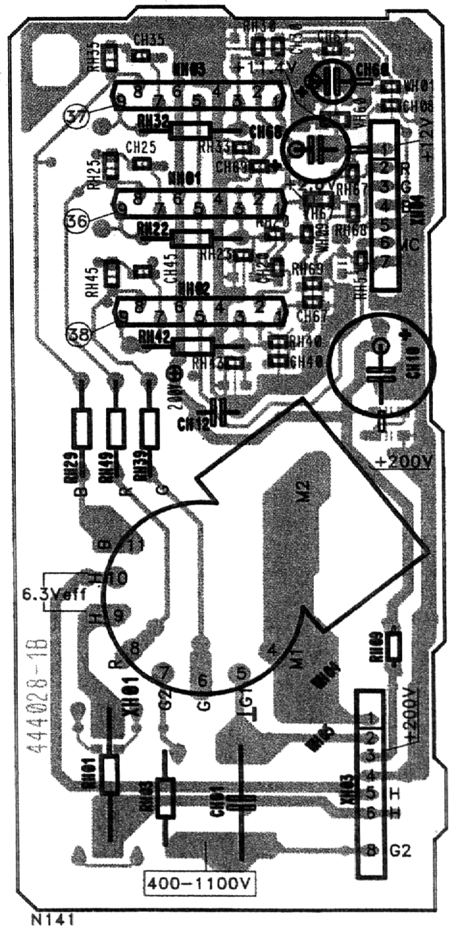


5

6

Control-unit


SE01
XE02
FE01
-Vol
+Vol
-Prog
+Prog
+12V
444027-1B
N140


+200V
6.3Veff
444028-1B
400-1100V
G2
N141

C.R.T. base board

NOKIA 6365VT

MODEL

SERVICE MANUAL